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English in academic and professional contexts
Editorial

Maria Kuteeva, Stockholm University

This special issue of *Nordic Journal of English Studies* explores a number of themes related to the spread of English as a global language in academic and professional domains. This spread is closely linked to global trends in technological development, population mobility, transnational business organization, and education, which is increasingly driven by market forces (e.g. Ek, Ideland, Jönsson and Malmberg in press) and neo-liberal ideologies (e.g. Block, Gray and Holborow 2012). As English is being used in international business and other professional contexts, there is also a growing demand for English-medium education which is now being offered in countries outside the English-speaking world (e.g. Mok 2012). This trend can be observed in post-Bologna Europe, where the Netherlands and the Nordic countries provide the largest number of English-medium programmes and courses (Wächter and Maiworm 2008). Such rapid changes in the linguistic landscape place additional strains on students, teachers, and business professionals, who are expected to operate in bilingual or multilingual settings. At the same time, in reaction to globalization, language policies regulating the use of English in high-stakes domains have been implemented on the governmental and local level, including the parallel language use of English and local language(s) in the Nordic states (e.g. Kuteeva 2011). These policies do not always match practices but they inevitably have consequences for teachers and researchers of English working at schools, universities, and other institutions. Thus, further research into the actual uses of English in educational and professional contexts is needed.

The papers published in this special issue reflect the current status of English in academic and professional contexts, above all as a lingua franca of international communication in science, education, and business. The first part deals with English in professional research and business contexts. In the opening paper, Anna Mauranen explores the phenomenon of research blogging focusing on the current perception of science blogs by the research community, their place in research

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dissemination, and their hybrid genre features in the context of academic writing traditions. The article problematizes the role of science blogging in relation to research publication practices: are blogs a vehicle for public outreach or for the discussion of serious findings? Drawing on a wide range of genre research, including English for Specific Purposes, New Rhetoric, and Systemic Functional Linguistics, Mauranen analyses two science blogs, one in theoretical physics and the other in microbiology. She concludes that science blogging reflects tensions resulting from the dramatic changes in ways to ensure high research standards and fast online communication and public engagement. Science is communicated online to very heterogeneous audiences, who, in their turn, contribute to knowledge construction in various ways. English is often used as a lingua franca in such online contexts, which has an impact on what is considered acceptable in terms of linguistic norms.

Inspired by the work of Bakhtin (1981, 1986), intertextuality has been a central concept both in literary studies and discourse analysis. For example, in the field of English for Specific Purposes, intertextuality in academic writing has been explored with a focus on plagiarism and on what is considered original text (e.g. Pecorari 2008). However, business writing conventions are very different from those in the academy, and to this day they have not been documented to the same extent. Philip Shaw and Diane Pecorari examine a corpus of chairman's statements from annual reports by 36 companies, most of which were listed on the London FTSE 100 in 2012 and therefore represent standard English norms. The authors analyse signalled and unsignalled intertextual relationships in the selected texts and conclude that intertextuality is indeed a pervasive feature in chairman's statements but it differs substantially from academic genres. Thus, chairman's statements refer primarily to earlier utterances of the chairman himself and other texts produced by the company in question. This inward-looking citation practice is in sharp contrast with the expectations imposed by academic writing conventions, which require writers to incorporate multiple voices from a broad range of external sources. The findings of this study suggest that students whose future professional activity may involve this type of corporate writing in English should be prepared to use templates, promotional referencing style, and other features of professional writing which seem to be at odds with academic writing conventions.

The third article in this special issue introduces the theme of English used in combination with the local language. Drawing on genre analysis (e.g. Bhatia 2004) and advertising research, Miguel Garcia Yeste describes how English is used in Swedish print advertising: which rhetorical moves include English words and phrases and what values these English expressions evoke. His findings point towards a relatively low presence of English in the examined sample of ten popular magazines, contrary to the assumption that English is ubiquitous in all popular domains.

The second part of this special issue includes several papers concerned with English-medium education in Scandinavian universities and other issues related to English for Academic Purposes. Christian Jensen, Louise Denver, Inger Mees, and Charlotte Werther present the results of a large-scale survey based on the analysis of 1,700 student responses to 31 non-native English-speaking lecturers at a major Danish business school, focusing on the relationship between perceptions of English language proficiency and perceptions of general lecturing competence. They have found that the former is a significant predictor of the latter: those lecturers whose English language proficiency was perceived by students as low also received low scores in the evaluations of their general lecturing competence. The authors argue however that this finding largely reflects predominant speech stereotypes as demonstrated by previous research on the effect of teacher accent variation on student perceptions of competence and social attractiveness. The article therefore suggests that student evaluations do not always fully reflect the teachers' competence in their subject, and the results of such evaluations should be used with caution in the context of English-medium content courses.

Hedda Söderlundh's article examines the use of English as a medium of instruction at a Swedish university, showing how English is being adapted to the local context. Unlike the previous article, Söderlundh's study resorts to ethnographic methods and conversation analysis and analyses authentic samples of student interaction. Her data consist of ethnographic observations of six university courses, interviews with students and staff, and video recordings of study situations. Söderlundh's analysis focuses on students' expectations of when it is appropriate to use English and how it is adapted to the Swedish university environment. She observes that Swedish is still used in both teaching and learning

situations in English-medium courses, and the local students establish norms for when, how, and with whom it is appropriate to speak English. English is perceived as a language that belongs primarily to the exchange students, while Swedes are associated with both English and Swedish. Thus, language choice is locally constructed, and the use of English can be seen as a transnational strategy.

While Jensen et al. and Söderlundh focus on lecturing and spoken interaction, Špela Mežek's study is concerned with students' reading in English at a Swedish university. More specifically, she discusses the effects of note-taking strategies on learning subject-specific terminology in English. Her study involved an experiment in which students were presented with new terms and could take notes, which was followed up by a multiple-choice test to measure their learning. Mežek found that students who took extensive notes and engaged with the text more also learnt more subject-specific terminology.

The last two papers in this issue focus on other aspects of English for Academic Purposes. Pamela Vang shows how Master's students can be motivated to learn academic English through discipline-specific summary writing. She argues that this approach is effective since it facilitates a critical study of different texts and their rhetorical features and incorporates reading skills with writing, grammar, peer critique and discussion. Finally, Purificación Sánchez's article analyses lexical bundles in three oral corpora collected at British and Spanish universities, with a specific focus on 4-word bundles. Sánchez examines the forms, structures and functions of these bundles, comparing native and non-native language uses. She found significant differences in the types of lexical bundles used by native (British) and non-native (Spanish) speakers and suggests that Spanish students should be exposed to more spoken discourse in English.

The articles published in this special issue draw on a variety of theoretical and methodological approaches to the study of English in academic and professional contexts, including previous research in English for Specific Purposes (ESP), sociolinguistics, corpus linguistics, professional communication, language education, and so forth.

All papers have undergone double-blind peer review, and I would like to express my deepest gratitude to external peer reviewers whose thorough and constructive feedback has been vital in the preparation of this special issue. They are, in alphabetical order:

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Hybridism, edutainment, and doubt: Science blogging finding its feet

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Abstract
Blogs have become everyday acquaintances in digital life. Although personal, political, and fashion blogs may be the best known, academics also engage in blogging about research. With fast-expanding digital publishing of all kinds, we may have to rethink the status of blogging in relation to our on-going research. This article discusses the perception of science blogs, and their status as a genre. It explores some blog threads talking about research blogging: are blogs a great way to improve outreach, or just dumbing down? Should we use blogs for publishing serious findings, or brush them aside as edutainment – preferably done by somebody else? Research blogs are explored in the context of science communication and research writing traditions, and their old and new features discussed.

1. Introduction

Blogs have only been with us for about a dozen years or so, but in this short time they have established themselves as a permanent feature of digital life. Politicians have adopted their use, celebrities, businessmen, and perfectly ordinary people set up their own. Blogging is a regular mode of public communication carried out by self-selected individuals. Academics also blog – but they have not been at the forefront of this development, many still appearing to harbour deep-seated doubts about the whole business, as recently illustrated by a blogging course for researchers at Cambridge University (Parr 2012). Meanwhile, blogs proliferate, and their functions expand to new domains and topic areas.

The personal blog is undoubtedly the best known, perhaps the prototypical representative of the species in public awareness, and it has also attracted the most research interest. This may also influence the common perception of blogs as a 'non-academic' activity. But since the blog has also made its way to the academic world, it is worth a closer look for linguists, especially those who take an interest in academic writing: in a world where information-seeking has moved almost entirely to the web, where do new digital text types fit in, and how do they affect academia? Academic writing has been thoroughly analysed in its

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prototypical forms, above all the research article, from all angles (e.g. Swales 1990; Berkenkotter and Huckin 1995; Fløttum et al. 2007). Popularisations of science have also become a well-established research topic over the last few decades (Gunnarsson 1993; Gregory and Miller 1998; Koskela 2002; Irwin and Michael 2003). However, science blogging by researchers themselves does not fall into either of these categories (see also Blanchard 2011), and is therefore worth attention.

Universities are increasingly encouraging their staff to blog. Even though much of university blogging is concerned with commenting on university policies, blogs are increasingly recognised as a means of boosting outreach and visibility, both of vital concern to universities in times of economic austerity and widening debates about public spending. The London School of Economics boasts of being a pioneer in this activity, having launched its first blog in 2010 (Elmes 2012). The central mission of their European Politics and Policy blog is stated as "to increase the public understanding of social science in the contexts of European governance and policy making" across Europe. Many other universities have followed suit; for example the University of Stockholm's Rector in his university newsletter column (January 2012) urged researchers to take up blogging to disseminate their findings. Obviously, research is the flagship of universities in the public eye – it is what rouses curiosity and invites confidence in universities working for the common good. It is also worth noting that the Eurobarometer on Scientific Research in the Media (from 2007: http://ec.europa.eu/public_opinion/archives/ebs/ebs_282_en.pdf) indicates that the majority of Europeans would rather receive scientific information from scientists than journalists (52% vs. 14%, respectively). With digital publishing now mainstream, and increasing interest in ensuring public engagement with science, potentially effective web genres should be a central interest to academia. Professional science journalists have long made their presence felt on the web, but not so many active researchers write about science to the wider population. In the light of public opinion, this situation is not ideal.

Despite university encouragement, the scientific community has been slow to warm to blogging. The question then arises why blogging should be of interest to a linguist. The answer is: for several reasons. First of all, as a central domain of digital publishing, blogs provide excellent data for exploring the effects and limitations of the medium on

writing. Second, blogs have been found to possess register features with systematic variation (Grieve, Biber, Friginal and Nekrasova 2011), which shows traces of mixing features of more traditional spoken and written registers. This register research also makes a linguistic contribution to blog typologies otherwise based on content analyses (e.g. Krishnamurthy 2002; Herring, Scheidt, Wright and Bonus 2005). Moreover, blogs develop specific discourse characteristics (Myers 2010), and since written text is typically accompanied by visual and auditory material on the web, blogs lend themselves well to multimodal discourse analysis. In addition, the web is multilingual, and although English clearly dominates, it is used as a lingua franca more than a native language, which makes it interesting not only to ELF scholarship, but to language change more generally. Finally, for discourse and genre analysts, the blog poses the question of its generic nature – is the blog a genre, and if it is, on what basis can we identify it as one, and does it challenge our conceptions of what determines generic status?

This paper is concerned with the research blog, produced by active researchers who write about their own work, and the comment threads that the blog entries generate. It is not concerned with science journalism, even though science journalism probably accounts for the best part of popular writing on science. The paper argues that the blog is a cluster of genres, some of which are highly relevant to present-day academia, and that the research blog has long roots in genres that relate to the advancement of science and scholarship. It also suggests that a focus on blogs alters the established perception of genres in relation to communities. Finally, it is argued that researchers blogging about their own work may be heralding new communicative practices in academia, simultaneously drawing on the very origins of science communication in the process.

The paper focuses on two blog sites kept by researchers keenly involved with some recent scientific controversies, where the discussion also drifts to the topic of blogging itself. It uses the blog postings and the comment threads to illustrate the genre changes in progress, and how they are seen in the research blogosphere. The first two sections discuss the common types and generic nature of blogs, after which the example blogs are shown to give rise to controversy over the relationship between blogging and science. The final section illustrates the connection

between blogging and early science communication, together with novelties brought up by the research blog.

2. Blog preliminaries: Typology and the issue of genre

The origin of blogs dates back to the mid-1990s, when websites with commentaries and online diaries began to appear on a regular basis. They were termed *weblog*s by Jorn Barger in 1997 "to describe the daily list of links that 'logged' his travels across the web" (Barger 2007). A recent definition delineates a blog succinctly like this: "A blog, short for a weblog, is a website containing an archive of regularly updated online postings." (Grieve et al. 2011: 303). Terms such as "links" and "postings" already reflect the openness of form in blog texts, and terms like "daily" and "regularly" point to the centrality of the frequent appearance of new items. Both features seem rather distant to the traditional academic paper.

Early bloggers tended to be designers or programmers in the technology industry. It was only around 1999 with easy-to-use editing tools appearing on the market that the larger public adopted the blog medium, and in the first wave of enthusiasm, blogging grew by over 600% from 2000 to 2001. Since then, continuing if occasionally fluctuating expansion has given the blog a steady position in digital discourse. At the same time, blogs have diversified, and it is pertinent to ask how far we can talk about one type of discourse – or genre – any longer.

Previous research has identified types among blogs, either based on their content matter (Blood 2000; Krishnamurthy 2002; Herring et al. 2005), or, less commonly, their linguistic features (Grieve et al 2011). The first content-based division comes from the early days of blogging; Blood (2000) was quick off the mark in weblog research, and found two major types. One that she recognised as the original type, the 'filter-style', which was link-driven, with usually the weblogger's comments on the interesting links they had found and wanted to convey to others. The other, a later development, she called 'blog-style', which was more varied, but basically an outlet for expressing the personal experiences of the writer. Slightly later, Krishnamurthy (2002) identified two styles, which he labelled 'thematic' and 'personal', and along similar lines, Herring et al. (2005) distinguished the thematic type (with further

subdivisions into 'filter' and 'knowledge' types), and the personal, diary-like blog. In contrast to these content-based categorisations, a more recent study by Grieve et al. (2011) adopted a form-based approach, and carried out a multivariate analysis of the register features of blogs. Their analysis discovered two major types, and one minor: thematic and personal were the major ones, and a minor kind was what they termed an 'expert blog'. A further blog type distinction was suggested by Miller and Shepherd (2009) between the personal blog and the 'public-affairs blog'. While they did not put forward a complete typology, their categorisation differed from the others in being based on typified social action rather than content or linguistic features, and the distinction they drew includes two types, one of which, again, is the personal blog. In all, despite different approaches, the ensuing types are surprisingly convergent: the principal distinction is drawn between the 'personal' and the 'thematic'. Clearly, it is the 'thematic' – or non-personal – type that bears the most relevance to science blogging.

Even though content-based and register-based analyses collude on a broad typology of blogs, we may still wonder whether blogs constitute one genre or many. Digital media have rekindled interest in the study of genres, traditionally already a prominent field of discourse analysis. Scholars have asked what happens to genres when they migrate to the web and assume new shapes, and whether the digital genres are really new, not just new guises for established ones (Bruns and Jacobs 2006; Giltrow and Stein 2009; Rowley-Jolivet and Campagna 2011). Instead of one genre, it might be more reasonable to talk about several blog genres – maybe even an unlimited number, given that new kinds of blogs seem to crop up sooner than anyone can really hope to keep up with. Would the thematic blog be a genre? Or would some of its subcategories, say, the political blog, or the science blog, be genres in their own right?

2.1 Is the blog a genre?

A new medium of communication provides an excellent opportunity to re-think our established analytical categories and their basis – such as genre. Among linguists and discourse analysts, some scholars (for instance Stubbs 1996; Biber 1988) make no distinction between genre and register, but use the terms interchangeably. This could be taken as a 'unificationist' position. Others, again, see genre as social action

(Berkenkotter and Huckin 1995; Martin 1997; Miller 1984; Swales 1990), which in principle opens up a possibility of looking at the linguistic forms of texts separately from their social functions. We might call this a 'dualist' position. The more linguistics and discourse analysis have moved away from analysing the surface of text and towards seeing all text as embedded in social contexts (see, e.g. Hyland and Paltridge 2011; Belcher, Johns and Paltridge 2011), the better a dualist approach seems to correspond to their research interests. It is important to recognise the correlations typically attested between situations and their register features (see, e.g. Biber and Conrad 2009); thus we might do well to talk about the co-evolution of typified social action and the linguistic features that characteristically go with certain social situations. Nevertheless, register features need not stay consistent throughout a genre event (cf. Ventola 1987; Biber, Connor and Upton 2007), and regarding the social and the linguistic as logically independent allows a more nuanced perspective on their interrelations than assuming an axiomatic relationship.

Thus, we might start our inquiry into the generic status of blogs by taking a look at the social action they perform. In this, we can follow the lead of Miller's seminal paper (1984) and take genre to be a type of social action recognised in a speech community or context. Community recognition of a type of discourse is best in evidence in the naming practices attached to them. Clearly, 'blog' is a name that is widely recognised for a type of communicative action, even among people who never blog themselves. But what in this case would be the 'community'?

Miller and Shepherd (2004) talk about "self-organized communities that support blogging". Indeed it appears to be the case that certain blogs or related (often interconnected) blogs attract networks of like-minded people around them. Blood (2000) already talked about bloggers in the personal blog tradition referring to other blogs to their liking, and conversations being carried out between groups of blogs. People who actively follow and contribute to a particular blog or a set of related blogs form a kind of self-selected, possibly also self-organised, group. By this token, they would fit into Anderson's (1991) 'imagined communities', with members who may never meet face to face. They would also fit in nicely with the notion of Community of Practice, or as Eckert and McConnell-Ginet (1992: 464) put it, "an aggregate of people who come together around mutual engagement in an endeavour".

However, the self-organised networks or groups around blogs are in principle completely open, members often remain anonymous, and blogging does not really seem to *arise* out of these communities. Blogs in this reading would hardly count as genres in Swales' (1990) sense of belonging to, or being possessions of, their discourse communities – rather, if we accept that a group of regular followers of a blog constitute a community of some kind, then the relationship would rather be the other way around: it is the genre that determines the community (as suggested in Mauranen 1993). This possibility can also be detected in the notion of 'context' or 'situation' that Miller (1984) stressed, which seems a far more suitable point of departure for an amorphous network bundle such as the Internet. The web is unmistakably a communicative context, even if not a community. Within that context, 'blog' is an identifiable and widely recognised name for a type of communicative activity. Seen in this way, the intuitive solution of the blog as a genre is supported. At the same time, adopting this view is compatible with the notion that social contexts spawn communities around them rather than being necessarily embedded in the activities of pre-existing communities.

The question remains whether there is one genre or many. Blogs have diversified enormously during their dozen or so years of existence, and despite sharing a generic name, their communicative ambitions can take different directions, as suggested by the typologies based on content and language (see Section 2 above). Miller and Shepherd (2009) identify the personal blog and the public-affairs blog as separate genres, based on essentially situational concerns – nevertheless leaving open the possibility of them being clusters of closely related genres. In the end, whether we call the blog a genre or a supergenre or genre cluster consisting of separate genres is a matter of the analyst's decision – in folk terms, the blog is the prototypical genre name, and all the other types discussed here result from applying the analyst's perspective.

3. Ancestry of blog genres

Starting with the working hypothesis that blogs are genres, it is a good idea to situate research blogs in the context of other genres. An apposite point of departure is a historical one, and in this we can benefit from Miller and Shepherd's excellent work (2004) on ancestral genres of the blog. They drew up a large family tree for blog genres, where the major

branches were (1) filtering and directory services, (2) commentary, and (3) journal and diary. Of these, the journal and diary genres, leading to the personal blog, seem the least relevant to the science blog, while the filtering and directory services (such as the clipping service and the edited anthology), together with commentaries (the pamphlet, the editorial, and the opinion column) look more promising. I shall look at the last two briefly, illustrating them with research blog examples. The examples are drawn from one of the two blog sites I am using as data in this paper (see further Section 4 below), namely Tommaso Dorigo's blog (hereafter TD) on issues relating to quantum physics (http://www.science 20.com/profile/tommaso_dorigo).

3.1 Filtering and directory services

This set of genres is related to collecting and organizing information, such as the edited anthology and the clipping service that make information available to others. The edited anthology, according to Miller and Shepherd, has its roots in the mediaeval passion for collecting and commenting on texts. The clipping service takes a step further, selecting, reorganising and interpreting information for others. This filtering service was also the original blog function identified by Blood (2000) in the very early days of blogging, and it clearly constitutes a major undertaking: the point is not to 'make information available', because information is already there. It is the immense quantity of information available to anyone that tends to be a problem. Thus, what blogs seek to do is information management work, in effect to sort out information that is relevant for a given purpose from that which is not, a task of growing importance in a world where the volume of new information is overwhelming. Information management is thereby also a major source of influence, and possibly of power.

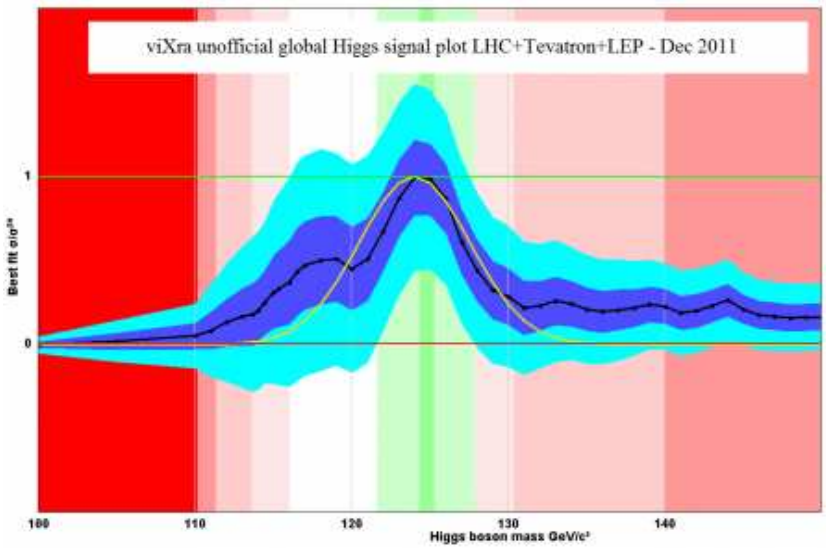
An example of links to related texts from a blog site explaining certain properties of the (then controversial and 'undiscovered') Higgs Boson from 2011 illustrates this well (Example 1). The links are chosen from among a vast range of possibilities by the blogger, and no doubt provide relevant further enlightenment on the Boson. The selection is nevertheless small and does not contain interpretations that question the existence of the Boson or the legitimacy of the search for it.

(1)
RELATED ARTICLES ON SCIENCE 2.0
Plot Of The Week: Improved Projections On ATLAS Higgs Reach
The Plot Of The Week - The 327 GeV ZZ Anomaly
New ATLAS Limits On Higgs Mass
Five New Higgs Searches By CMS!
New CMS Limits On Higgs Mass (TD)

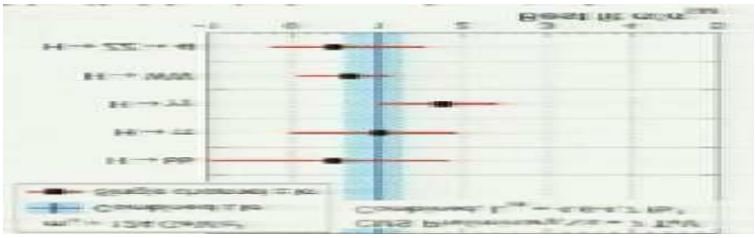
3.2 Commentary

The other major ancestral branch on Miller and Shepherd's tree is the commentary, comprising genres such as the pamphlet, the editorial, and the opinion column. Commentary is manifest not only in blogs themselves, which typically provide reviews of recent science news or findings, but also in the further comments they beget. In this respect, the great-great-grandchildren have reached far beyond their early ancestors, as free commentary has become the landmark of web activity. Example (2) illustrates a case of research commentary. Here the commentary is the main purpose of the blog entry, and provides the matrix text within which object text is embedded (underlining outside the web links is mine and refers to the language points taken up below).

(2)
Firm Evidence Of A Higgs Boson At Last!
By Tommaso Dorigo | December 13th 2011 07:18 AM | 92 comments | Print | E-mail | Track Comments **Tweet**
- Philip Gibbs does a great job, as always, at combining -albeit approximately- the results of different experiments in the Higgs search. He now has even a full combination of LEP II + Tevatron + CMS + ATLAS, where the signal strength, in SM units, fits absolutely bang on for a Higgs mass of about 125 GeV. Please see his article at the link above; but I cannot resist from stealing his most intriguing picture (sorry Phil!):



If Phil did his homework correctly, the combination fits well the signal hypothesis and is over three sigma away from the no-Higgs hypothesis at that mass... This reinforces my belief that what we saw today does constitute "firm evidence". My opinion, sure.
[. . .]
Perhaps the most interesting plot by CMS is the following one, showing the best-fit signal cross section from each individual channel, compared with the one expected for a Higgs boson of 124 GeV (blue line): there is full compatibility with the Higgs!



(TD)

The text abounds with evaluative language (cf. e.g. Hunston & Thompson 2000; Mauranen 2002), assessing the import of the scientific data (*albeit approximately; absolutely bang on*; *the most interesting plot; full compatibility*) the status of the assessment (*my belief; my opinion*), and people's performance (*does a great job; if … did his homework*

correctly; his most intriguing picture). Some of the evaluation has a hedging effect (*approximately, opinion*), some a boosting effect (*absolutely, bang on, great*). Punctuation with exclamation marks, quotation marks, and sequences of three dots adds to the strong appraisal effect, distinguishing the interpretations from more scientific passages and diagram material.

Commentary from the readers on the blog, itself already a comment, is where blogs take a new departure compared to their ancestry. This 'metacommentary' is shown below (Example 3), a sequence of four consecutive comments selected simply for their brevity, taken from the first responses to the blog entry above:

(3)

- This title will probably backfire.
  Thanks for making some of the plots available. The video broadcast was unfortunately very difficult to follow.
  Anonymous (not verified) | 12/13/11 | 09:40 AM

- I'd say things are still fairly inconclusive. From the 'looks' of things, we'll need 10fb-1 of data to be comfortable with any yes/no evidence. I'm disappointed in your uncharacteristic optimism :)
  Anonymous (not verified) | 12/13/11 | 09:50 AM

- Atlas has a Higgs signal at 100GeV in gamma-gamma that looks equally strong than that at 126. strange...
  chris (not verified) | 12/13/11 | 10:10 AM

- Put me in the remains to be convinced camp. When either Atlas or CMS gets well over 4 sigma i'll be persuaded. I believe there have been numerous 3 and even 4 sigma bumps over the decades which end up being background and I'm uncomfortable with the combining of the two datasets. (TD)

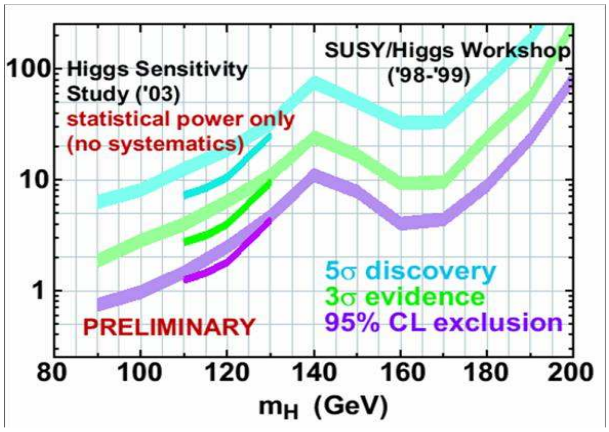
The comments give a quite spontaneous feel, since there is little in the way of politeness conventions, and they are not prefaced by much orienting material such as metadiscourse (apart from ***I'd say*** *things are*…). It seems from larger samples, though, that dialogic metadiscourse is used more when something unusual or sensitive appears in the situation, or around beginnings (Mauranen forthcoming).

3.3 The conference talk

Besides the ancestral genres of blogs that Miller and Shepherd identify, I would like to add one that is specifically relevant to the research blog, namely the conference paper. In essence, many research blogs follow surprisingly closely the typical structure of a conference presentation (Ventola, Shalom and Thompson 2002; Mauranen 2013): the first stage is the core element, a prepared presentation, and the next a discussion section. The latter is optional, but as it indicates audience interest in the first part, it is vital to make the whole successful.

Presentations on blogs resemble those at conferences: they are short and succinct, showing images and diagrams together with associated textual explanations (Example 4). Their register follows largely the conventions of written academic prose.

(4)



Let us consider only the purple band: it shows, as a function of higgs mass, the amount of data (in inverse femtobarns, on the vertical axis) that, if collected by CDF and DZERO, could be predicted to yield an exclusion of the corresponding mass (on the horizontal axis), at 95% confidence level: id est, a limit **R<1**. We can take that luminosity and compare it to the luminosity used by CDF to obtain their latest Higgs limits combination -that of November 2009, which is shown below. [. . .]

As the discussion starts, there is a clear shift in register towards less formal features, closer to spoken dialogue (addressing interlocutors by their first names, starting sentences with *and*, and so on), with questions from the audience and answers from the original presenter, as below (5):

(5)
What about combining LHC and Tevatron results? Would that help give a chance of discovering a low-mass Higgs, say 120 GeV, before the LHC shutdown?
Francis Bursa (not verified) | 02/08/10 | 05:00 AM

I do not see that happening, Francis, unless there is significant evidence on both datasets. And this is highly improbable. There are also other, more "political" reasons for not doing it.
Cheers,
T.
Tommasso Dorigo| 02/08/10 | 05:29 AM (TD)

Blog moderators act as chairpersons of a kind – if not giving out speaking turns, nevertheless monitoring the direction of the discussion. In the next example (6), the moderator passes an evaluation on the relevance of a comment in the thread, rather in the manner a chairperson in an academic conference might act, even though the wording obviously would be different in a conference. Both are unmistakably instances of interactional management talk.

(6)
Dear Leo, off-topic comment. Please no replies to it, or I will have to take it down...
Cheers,
T. (TD)

Along with the similarities, there are obvious differences between the conference presentation and the research blog. The principal one is the audience. Conference audiences consist of members of the same discourse community, they are presenters' peers, and themselves experts in the field. Blog comments can come from anyone, as commentaries are normally open to all users of the Internet. Although commentators on science blogs seem generally to have some background in the field, at least an amateur's interest, the nature of the discussion is highly variable, ranging from peer comments from fellow researchers to questions by complete outsiders. Nevertheless, the affinities between the conference talk and the blog are clear enough to warrant a family resemblance, even though it would seem hard to try to fit them into the same genre exactly. But somewhere along the evolutionary line of a research blog, traces of the conference talk are detectable.

3.4 In sum: Blogs and their generic ancestry

In all, then, blogs appear to have a long and respectable lineage, and research blogs can readily be identified as descendants of the filtering tradition as well as the commentary tradition. Moreover, as a relatively recent (post-mediaeval in any case) predecessor we find the conference presentation. In contrast to the others, this last one is not written discourse. That is, it is not the published conference paper that resembles blogs; it is the live presentation and the ensuing discussion. This adds a strand to the much-discussed mixing of spoken and written registers on the Internet.

A fundamental feature of this digital medium is the possibility – and active use – of open commentary, as we saw in the above examples. This is a genuinely new feature in scientific and scholarly traditions. While peer commentary has been desirable, the scientific community has been open to members only, and consequently these discourse communities (Swales 1990) have been essentially closed, with a variety of gatekeeping practices in place. In blogs, audiences are multifarious and heterogeneous; they are not mere observers or receivers of scientific communication, but active commentators and participants. This also sets blogs apart from traditional popular science where scientists' and scholars' texts were edited with the general public in mind (see, e.g. Russell 2010). In terms of social action, this open participatory possibility implies a distinct change to the generic nature of the blog in comparison to its ancestry.

Apart from the analyst's perspective on research blogs, it is of interest, in the best traditions of genre analysis, to try to capture something of the actual communities or users' perspective, too. For this study it seemed a good point of departure to look at blog site comments on research blogging itself. Therefore, to get a glimpse of what might be going on in bloggers' own view, I turned to two research blog sites, and looked for bloggers and their commentators talking about blogging as an activity. At the outset, one might imagine that merely by exploring blogs, as opposed to, say, interviewing people, there is very little to go on in the way of comments on blogging. But as it turns out, science blog discussions talk a good deal about blogging itself, in addition to science.

4. How do science blogs talk about blogging?

I followed two blogs, both of some duration (two to five years), and concerned with well-publicised recent scientific controversies. The main criterion for selecting these was that they both had an active scientist blogging on his or her own on-going research. These two blogs were a pilot for a larger study on research blogging that was at a preliminary planning stage in 2011. I wanted to explore their characteristics and wanted them to be different: they came from different disciplines, included a non-native speaker of English as well as a native speaker, and both genders. The larger research corpus that was then planned is currently being compiled (www.helsinki.fi/englanti/elfa/wrelfa.html), and will enable more extensive investigations into research blogs. I thus ended up with one blog in theoretical physics (TD, from which the examples in the previous section were taken), and another in microbiology. The first (Tommasso Dorigo's blog "A Quantum Diaries' Survivor" in Science 2.0), was concerned with the search for the Higgs Boson, engaging in lengthy disputes around its existence. The second (Rosie Redfield's "RRResearch", hereafter RRR) was concerned with arsenic-consuming bacteria, a widely publicised piece of science news since the publication of a paper on the discovery of such bacteria in *Science* in 2010 (Wolfe-Simon et al). Both blogs are kept by researcher scientists involved with the empirical work themselves, writing about their own and related research in their fields. Neither therefore represent more conventional science journalism, where professional journalists report on findings originating in the work of scientists and scholars. There is a difference, then, between first-hand science reporting as in these blogs, and the second-hand reporting of conventional science journalism, which is a well-established field of writing, and extends from dedicated newspaper sections to specialised journals and, increasingly, websites, podcasts, and other social media channels.

Both blogs still continue, focusing on the same and related topics, after dramatic turns in the debates. It seems that the Higgs Boson has been getting the most headlines after the declaration of its 'discovery' by the heads of the research communities working on it, although the arsenic-eating bacteria were a major media event two years earlier. The acceptance of the arsenic blogger's paper on the topic for publication in Science took place almost simultaneously with the public confirmation of the Higgs Boson, but did not cause an equal stir in the public media.

Although at the time of writing this article (July 2012) both topic threads thus seem to have enjoyed remarkable triumphs at last, the controversies are by no means over. No final truths have been settled on, but uncertainties in findings and their interpretations are claimed, despite the substantial amount of new evidence that has been accumulated – in brief, a strong resemblance can be seen to how we are used to understanding cyclical progress in science: by research, results, questioning, and more research.

In the following, I focus on the comments that appeared in the blog threads on the relationship between science and blogging. I sampled the blog sites over about two years on these topics, and went on to categorise the data items according to their stance towards blogging (whether they evaluated it positively or negatively in relation to science), and with regard to the finer distinctions among science blogs that participants also made. I show examples to illustrate these categories from the discussion threads as well as the actual blog postings, so as to capture the topics that any active participants in addition to blog writers consider worth talking about.

One notable feature in both blog threads is that they engage in discussion about science – what it should or should not be, and what it contrasts with (see (7). Every now and then low esteem for blogs comes out, as in (8) but also its invigorating potential as an alternative to traditions that are perceived as having seen their best days, as in (9).

(7) What bothers me most about that episode is that the discussion was mostly about politics [funding, who owns data, etc.][1] and not about physics (TD)

(8) Yes, I realize that this is just a blog, but… (TD)

(9) I concur with your bottom line. I think that conferences have become a rather sterile ground lately: people are afraid to speak up, lively discussions never arise because the agendas are too tight, and moderators cut out anything that seems controversial. Fortunately, there is the web :) (TD)

Writers do not shun strongly evaluative, even emotional expressions in discussing controversies over scientific issues. The debates concerning the relationship of blogging and science can become heated, as web discussions tend to, but conference discussions more rarely. The

[1] My own clarifications or deletions are marked with square brackets.

following comment, within which an earlier one is embedded, illustrates the attitude and the tone (10):

> (10)
> **L.M. said...**
> S. M. says, *This whole thing is grossly inappropriate. You should have sent this to the journal of record FIRST, where it can be properly reviewed. You're not some advanced hobbyist layman with a good idea but no standing. You'd almost certainly be given a full hearing in the appropriate forum.*
> What planet are you from?
> We're talking about a major press conference designed to promote a study funded by [xx]. Blogs are the appropriate place to counter such behavior. The science in the published paper doesn't get a free pass when it's presented as a major news story. (Or even if it isn't.) Your advice is tantamount to suppressing criticism on the grounds that peer review in science journals is the only way to counter bad science. That's absurd. (RRR)

The views aired here also show some other typical features of the discussion threads. Highlighting devices (such as upper case lettering), extreme evaluative expressions (*grossly inappropriate; absurd*) or dramatic counters (*what planet are you from?*) all remind us of open public debates on the web, but are rather distant from usual academic writing practices. On the other hand, it is common practice in academic discourse to cite the target of criticism if it does not immediately precede the comment. The major dividing line among the commentaries is also well illustrated in Example (10): blogs tend to be either constructed as disrupting best scientific traditions, or as replacing stale practices with aptly contemporary means. We can discern two opposing discourses in the discussions, one that might be termed ‘traditionalist’, and the other ‘radical’.

4.1 Blogs are harmful to science

The core of the traditionalist message could be summed up as ‘blogs are not real science’ (Extracts in 11): essentially this view holds that scientific issues should not be addressed on platforms like blogs, because such fora are not serious enough. Bloggers aspiring to publish science should instead resort to mainstream routes for publication, go through peer review and address their findings and questions to the proper audience, which consists of their peers, other scientists.

(11)
(a) you refute work with your own work, or your published criticism, which gets reviewed, not with a blog. (RRR)
(b) This is what needs to be debated through the peer reviewed process instead of on a blog. (RRR)
(c) … I'd like to respectfully voice my opinion that "science by blog" is simply not a good idea… (RRR)
(d) I think you are equally guilty of premature conclusions and using the media to create a circus. (RRR)
(e) Given that reality, expert public discourse of the type seen on this blog (with reckless speculations on scientific agendas and suppression of data) is not merely unhelpful; it may actually be dangerous and irresponsible. (RRR)

The views thus range from comparatively mild rebuttals (*simply not a good idea*) to warnings about peril (*dangerous and irresponsible*), and some also direct bloggers towards the right path (*needs to be debated through*…).

4.2 Blogs are beneficial to science

In contrast, the opposing, radical view holds that 'Blogs are at the heart of science' (Examples 12-13). These comments point out that free criticism is at the core of what science is about, and that publishing and publicising new results as fast and widely as possible is in everybody's interest.

(12) Blogs are just making this process more public and that's good thing. It's the way science has always operated. (RRR)

(13) The problem is we are in a transition period.
The way it has been for as long as anyone can remember is: Scientist collects data, analyses data, discovers something, then publishes one definitive account. The end. That made sense when we were working in paper and ink. Now we work in digital formats and have a ability to store every draft, every dead end, every misstep for posterity.
So what does that mean? Scientist collects data, blogs on it get's feedback, analyses data, blogs about it, gets more feed back, discovers something and publishes about it (with a pre print on arxiv to show the trackbacks) then people blog about the finished product. The way things are done now are more akin to an open source project than say the Manhattan project. (TD)

The much-debated flaws in the peer reviewing system were also brought up, sometimes with intense emotion (14), but also in calmer terms (15).

(14) …tantamount to suppressing criticism on the grounds that peer review in science journals is the only way to counter bad science. That's absurd. (RRR)

(15) If we are looking for a viable alternative to the current system of peer reviewed publications, which often screens IN bad science and screens OUT good science with null findings, I think we've found it. (RRR)

(16) I had argued that a number of research findings are fundamentally flawed even though they were approved by peer-reviewed process. It is high time that some of the practices in science need to be checked and scrutinized. (RRR)

Concern with the quality and ethics of research was also often voiced, and the danger that attention might be directed to poor quality science rather than high quality science. In the next example (17), this was linked to the need for the general public to get first-hand information about what is going on in science.

(17) Since this story has been so widely reported on in the media (with all the hype that NASA might have been aiming for), we as scientists now have a moral obligation to voice our concerns and criticisms in a publicly accessible medium, such as this blog. (RRR)

The notions that find expression in these comments thus range from claiming normality for blogging in scientific practice (12 and 13 above) to the opening up of new possibilities for remedying the perceived evils that have set in within the world of science, such as the problems of peer-reviewing (15 and 16). Peer reviewing systems have received a fair amount of criticism on many scientific fora, and the last couple of years have seen a revival in the critique again. In this, too, the blog issues reflect debates very much alive in the scientific community.

4.3 Genre awareness: Making finer distinctions

Comments and blogs from both camps showed a high level of genre awareness (see, e.g. Johns 2002): whether the writers were for or against blogging as a form of research writing, they certainly manifested staunch views of what blogs are. Moreover, many comments also showed sensitivity to finer divisions, making references to the 'typical science blog' and contrasting it to other kinds, as in Example (18). Similar distinctions were extended to people: qualified members of the scientific discourse community were differentiated from just any enthusiastic

layperson (*You're not some advanced hobbyist layman with a good idea but no standing* (RRR), and a serious blogger from 'some anonymous physicist blogging' (19). In this way, writers in the blogosphere were discerning fine distinctions not only among blogs, but even within the sphere of science blogs. Such commentary suggests genre status for the research blog, but not necessarily a unified or uniform genre.

(18) Not your typical science blog, but an 'open science' research blog. Watch me fumbling my way towards understanding how and why bacteria take up DNA, and getting distracted by other cool questions. (RRR)

(19) I think, […] society recognizes after more than a decade of blogging that there are varying levels of that also - you blogging is not the same as some anonymous physicist blogging or some physics amateur on the Internet. [. . .] (TD)

As a further indication of genre sensitivity, drawing the line between journalism and research blogging was raised, as the next two examples show. Both the commentator in (20) and 'Armonyous' in (21) make a clear distinction between journalism and science blogging. The writer of (20) also seeks a differentiating term or concept to distinguish science blogging from journalism on the basis of "knowledgeability" and from 'just blogging' on the basis of credibility.

(20) There needs to be an easier distinction between journalism, press releases, blogging and what you (and we - actual blogging is a tiny 4% of our content) do, because your work is a lot more knowledgeable than journalism and way beyond blogging in credibility. What is that term? Science 2.0 doesn't work because you it can't end in -ism or -ing but someone will come up with something. (TD)

In (21) the commentator indicates disagreement with the blogger about two things: his cavalier disregard of the distinction between journalism and science (*journalists checking out your blog; journals…write*) by using 'catchy' expression, and the lack of veracity of his message (*simply not true*). The blogger counters this by equating blogging with journalism, thus justifying 'catchiness', and drawing the distinction between his blog and 'other magazines' on the basis of superior content.

(21) You should be very cautious with titles like that, specially when you know you have journalists checking out your blog.

> What you say is simply not true but it sure sounds catchy. Don't complain afterward when journals (even as serious as The Economist) write carelessly about the LHC.
> Verified Armonyous (not verified) | 04/12/10 | 15:35 PM
> Armonyous,
> maybe you fail to realize it, but this is already a form of journalism... And as such, sometimes it uses catchy titles. I prefer my articles to those of new scientist or other magazines, which have catchy titles _and_ incorrect content.
> Cheers,
> T. | 04/13/10 | 02:30 AM (TD)

Clearly, then, there is awareness about the unsettled nature of the research blog as a genre, and controversy about what this entails. More importantly, these deliberations around the generic status seem to arise from spontaneous commentators who are interested in the topic areas, but only some of whom appear under their own names, or show other marks of community affiliation, such as references to each others' blogs, or being known to each other outside the blogosphere. Therefore, discussion of the above kind contributes a comment on what might define genres: it would seem, again, that genres are constructed in contextualised discourse, not necessarily in a pre-existing community.

5. Unique features of the science blog

We saw above that the research blog is firmly rooted in a long ancestry of respectable genres, and that despite its modern digital guise, it follows in the footsteps of its progenitors fairly faithfully. But that is not all: blogging also brings about new practices. In an intriguing way, doing science by blogging realises some of the ideals upheld in 17th century debates around the foundation of the Royal Society and rising experimentalism (Shapin and Schaffer 1985), with the ensuing modes of scientific rhetoric (Gotti 1996, 2003; Gross et al. 2002; Valle 1999). Blogs involve the collective witness, a group of experts or lay spectators who observe the experiment with their own eyes and are thereby able to agree on what constitutes Boyle's "matters of fact" (Shapin and Schaffer 1985:22). We can see a web-mediated version of this taking place in the examples below (22- 23), where the on-line immediacy gives blog followers a sense of seeing how the experiments take place step by step, and how the results gradually come into view.

Example (22) sets the scene, with the blogger explaining what the current state of the research is (*Any day now I hope to receive some preliminary results*…). The reporting adopts a narrative style: *I thought I should…; I got sidetracked;*

(22) Any day now I hope to receive some preliminary results from the mass spectrometry test for arsenic in GFAJ-1 DNA. In preparation I though I should at least attempt to understand the control data that the grad student doing the work sent me a couple of weeks ago. But I got sidetracked by the easier task of understanding some control CsCl-gradient data he also sent. This is a pre-analysis step, used to further purify the DNA before the analysis (RRR)

In (23) the narrative moves into free indirect speech, as if it were the writer's stream of consciousness (*Do we need to also consider* …). A passage of consulting Wikipedia (*What does Wikipedia say? Nothing about other ions*) has an air of spontaneity, with the bracketed sentence (*Ah, the correct term is*….) conveying a particularly powerful sense of immediacy.

(23) [. . .] Do we need to also consider contaminants that might have banded at a specific density in the gradient? The centrifugation is powerful enough to cause the heavy Cs+ ions to move down in the tube, might it also affect the distribution of other ions? What does Wikipedia say? (Ah, the correct term is 'isopycnic centrifugation'.) Nothing about other ions. CsCl gradients have typically been used to separate DNAs with different base compositions from each other (e.g. nuclear DNA from mitochondrial or plastid DNA); I don't know if anyone ever used them to separate DNA from soluble contaminants. **Bottom line:** If the LC-MS data shows arsenic in the DNA, we can polish up these DNA purification steps. If it doesn't, we won't need to bother. (RRR)

The reporting here seems to simulate the kind of eye-witness experience that was sought by early experimentalists like Boyle with collective observation: groups of experts saw experiments performed and were therefore convinced of the veracity of the results. Clearly, the Internet community is not physically present at the experiment, but the usual gap between the actual experiment and the written report, as in research articles, is much narrowed. Moreover, accompanying video material adds to the sense of participation in many cases.

On-line reporting of experiments is akin to the 'replicability' tradition, which has become a firmly established feature of scientific articles. This was also keenly advocated by Boyle, even though he

already saw it was not going to be easy. The tradition is maintained in research papers to satisfy the academic community that acceptable procedures have been followed and in principle the experiment could be carried out by someone else. Actual replication experiments tend to be rare, and performed only when findings are exceptionally controversial, as in the Cold Fusion case from 1989, or a recent case of neutrinos that were claimed to be faster than light in 2011. Our example comes from one such debate, where the experiments reported in RRR are being run in order to test the claim put forward by Wolfe-Simon et al (2010) that some bacteria can use arsenic instead of phosphorus as a nutrient.

Internet reporters, with their spontaneous style, graphs and video clips, leave out much technical detail, background preparations, earlier mistakes, and so on, just like any report of an experiment. They nevertheless show, demonstrate, and reflect on their on-going work in a way that lets spectators into the process beyond anything that a finished product in the form of a published article can attempt.

Shapin and Schaffer (1985) talked about the utilisation of 'knowledge-producing technologies'. One was the literary technology, by means of which the experimental events were made known to those not directly witnessing them. Here we can see the Web as a technology that enables a hybrid to develop between the actual live performance of an experiment on the one hand and writing it up on the other, with the inevitable distance of the latter from the demonstration. What is specific to the Internet is that the audiences are potentially enormous, and not restricted to a locality as in the case of eye-witnesses, or to a community of experts as in the case of research articles.

Equally importantly, the audiences are not confined to the role of spectators: one of the signature features of the digital medium is open commentary, and this is genuinely new. It has not been part of scientific discourse traditions before. The heterogeneous audiences are not only permitted to observe, but they are also invited to comment, ask questions, express doubt, criticise, and make suggestions. It seems that science blogs have features that take us back to the times when science journals were only about to start: the desire to bring the evidence right to interested audiences, almost performing the decisive experiments under their own eyes. At the same time, they make use of digital technologies in distributing this knowledge-production mechanism to wide audiences,

who can also participate in establishing the presented matter as knowledge – or rejecting it.

6. Conclusion

This paper has been looking at research blogging – how it relates to other blogs, how it relates to its generic ancestry, and how its traditional and new features intermingle to produce a recognisable text type. The question was raised whether the research blog should be seen as a genre of its own, a subgenre of the 'blog' genre, or a cluster of genres. Exploring the generic nature of blogs, it became clear that the relationship of community and context needs to be reconsidered in order to settle the question: the new medium does alter the terms of determining genre. It is the context that seems to create genres, and communities emerge around them. The concept of the genre-regulating, pre-existing community does not apply to web-based genres.

With regard to the generic status of blogs, it would seem that the blog is more like a genre cluster than one genre in itself. The different purposes and contexts blogs are used in do not warrant a single generic category. At the next level down the scale, however, it would seem more appropriate to take the research blog to constitute a 'basic level' genre. Blogs have introduced new practices in academic language and academic reporting. As Gilbert and Mulkay (1984) observed in their classic study of scientists' repertoires, researchers talk about their investigations (the 'contingent' repertoire) in ways that differ in important ways from the ways in which the work gets written up (the 'empiricist' repertoire). While constructivist analyses of scientific rhetoric (e.g. Bazerman 1994) already narrowed the gap between spoken and written representations by looking at the written report as rhetoric, blogs go further. In blogs we see researchers' comments on their procedures, reflections, and intentions, together with reports of what went wrong or did not work. This is a new practice, in making the 'contingent' public along with the 'empiricist'. Linguistically there is much of the informality and spontaneity of spoken language.

The unforeseen practice of involving audiences in open commentary means that unknown, heterogeneous, and varied audiences may participate in co-constructing research debates. This may not always be a

blessing (Blanchard 2011), but it provides a new opportunity of direct involvement for anyone who is so inclined.

In terms of science publication, the emergence of the science blog reflects tensions in the face of dramatic changes – notably between traditions established to uphold standards, and the reformist enthusiasm to tear down old edifices in the interests of the ideas that originally inspired scientific publishing. It also reflects new challenges to science communication when the Internet has become a prime source for all information seeking: to reach the desired audiences, what is the best policy for publication? The answer can be 'both', as one possibility already in use is releasing drafts and rough ideas in a blog or on a personal website first, and then developing them into a publishable version submitted to a traditional scientific or scholarly journal. We already discussed one such example above, and similar practices can be observed for instance in the humanities (see, for example http://tar.weatherson.org/; http://experimentalphilosophy.typepad.com/). One of the intriguing consequences is that the audiences can be very mixed, as we already saw in the examples. Some commentators are peers, others interested laypersons.

The blog discourses in this paper reflect many tensions currently in the air: the growing demand for outreach does not fit easily with all traditions of expert-based research communities, and publicity is not easily reconciled with the confidentiality that research ethics today require. Peer-reviewing traditions to uphold standards are not compatible with the critique that arises from releasing findings on the Web. Much research requires long-term investment of resources and effort, which is at odds with producing reportable findings at short intervals. Moving towards blog-type publicity also alters the practice of releasing findings only when they are ascertained and accepted after going through several stages, shifting the balance towards publicising work in progress.

Researchers offering their own work and findings on the web constitute a fresh alternative not only to academic research publication, but also to established science journalism. Science journalists are professional mediators, often with an educational background in the disciplinary area they write in; however, they constitute an extra step between the research and the wider audience. Their texts, clips, and programmes can be of high quality and interest value, but they inevitably lack some of the immediacy of direct contact between research and the

interested reader. Even if they invite comments and discussion, it is all distanced from the primary research.

Scientists are increasingly calling on the wider public to engage in crowdsourcing to help out with data collection and analysis. Citizen scientists want to participate as well as satisfy their curiosity; non-experts want to hear about new findings from researchers rather than from mediators. The ivory tower has long been crumbling, and research blogging could be one way of building new bridges between the interested layman and the professional expert.

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Types of intertextuality in Chairman's statements

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Abstract
Intertextuality is a pervasive feature of all discourse, but norms and conventions vary widely across domains. Academic conventions can cause difficulties for those who have been exposed to, or move on to, domains with other practices. Academic conventions are well documented; here we examine those of business writing. We created a corpus of chairman's statements from annual corporate reports and searched them for signalled and unsignalled intertextual relationships. We hypothesise that statements from the same company will be linked by both repeated phraseology and acknowledged intertextuality.

1. Introduction

Intertextuality, the idea that texts are made of other texts, has been a commonplace since Kristeva (e.g., 1980) and Bakhtin (1986). We only know what to say and how to say it because we have heard or read what others have said or written. But intertextuality comes in many different forms and different discourse communities use it for different functions (Scollon 2004). Teachers of language for specific purposes (LSP) must facilitate their students' acquisition of the communicative practices of their target communities. However, this can be problematic if they differ substantially from the practices of the academic community. Some of the problems that may arise are due to the range of textual practices that students are familiar with from the lifeworld or from other domains, and that they bring with them into whichever new domain the LSP teacher is trying to introduce them to. In many ways the practices to be learned conflict with those which students have been exposed to in school or have observed in other, visible and public domains such as journalism. The delivery of adequate LSP instruction depends in part on the teacher's awareness of such potential conflicts. This is, naturally, true of a range of language features; intertextuality is a case in point.

Intertextuality has notoriously been defined in a number of ways. One characteristic often associated with it is polyphony (Ducrot 1984, Nølke 1994, Fløttum 2004), the recognition that texts contain different 'voices' encoded in various ways. However there are intertextual links

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among texts that have not been captured by investigations of polyphony, and there are polyphonic features that have nothing to do with relations between two texts. Fairclough (1992) provides a linguistic typology of what is called discourse representation, a concept close to Ducrot's polyphony. Discourse representations are divided at the first level between boundary-unmarked and boundary-marked. Boundary unmarked discourse representation covers presupposition, negation, metadiscourse and irony, cases where the author adopts or implies another voice than their own in the text. Boundary-marked ('explicit') discourse representation is subdivided into direct quotation, indirect speech, and the use of scare quotes.

We would, however, accept Hohl Trillini and Quassdorf's (2010: 272) still broader definition: 'intertextual processes involve, minimally, an earlier and a later text and an element from the former that is discernible in the latter'. Further we would argue that in non-minimal cases there may be multiple earlier texts contributing a particular element to a later text. Given this definition, it is possible that not all 'discourse representation' is intertextual, and that neither is all intertextuality polyphonic. Fairclough's (1992) unmarked categories, particularly negation, presupposition, and irony, do not in general relate to actual identifiable other texts; in fact they construct other voices independent of real texts. Similarly, a text in a given genre or register will have phraseological likenesses to another text in the same genre or register (e.g. Wray 2002, 2006) which are not intended to evoke any other voice and in fact are intended, if there is any intention, to confirm that this text expresses the same collective voice as the others. It is debatable whether this would be regarded as polyphony. However, Hoey (2005) argues that our awareness of formulaic language as well as genre and register conventions, comes from the fact that we have been repeatedly exposed to conventional forms of expression and thus are 'primed' to produce them. In that sense, the influences of the earlier texts which are the sources of exposure make these language features intertextual.

Investigations of intertextuality examining both specific earlier and later texts have included Pecorari (2008) and Hohl Trillini and Quassdorf (2010). Pecorari focused on academic writing and the intertextual ties between dissertations and theses, and their sources. Hohl Trillini and Quassdorf used a large database of literary, literary-critical, and other 'later' texts all referring to the same 'earlier' text, *Hamlet*, and derived

categories from the relations they found. In both studies marking and modification emerge as central criteria. Marking for intertextuality, the latter found, can be done by any or a combination of the following: the name of an author or work, a 'verbum dicendi or other metalinguistic marking', a typographical device, a textually implicit marker such as a syntactic anomaly, register mix, or anachronism, the receiving text genre (such as an anthology), or 'context' or of course there can be no marking (Hohl Trillini and Quassdorf 2010:280). Modification covers the degree of verbal or other identity between the two linked texts, on a continuum from quotation, in which the relationship is both lexical and semantic, to paraphrase, in which the only relation is semantic.

In Pecorari and Shaw (2012) we sketched a typology of intertextuality for applied language studies, based on the idea of identifiable similarity across texts rather than polyphony within a text. It is based on three primary criteria which emerged in interviews with experienced academic writers about the intertextual relationships they identify in student writing. These are the retrievability of a particular target text, conformity to community norms in respect of modification and marking, and writer intention.

Our first category, which we called indirect intertextuality, covered a range of features found in numerous earlier texts, rather than a single specific source. In some cases there is no intention to evoke a separate voice, as with repetitions of language in discussing the same topic or realizing the same genre. In others the earlier texts are not specific ones; an example is the productive expression 'x is the new y', as in 'pink is the new black' or 'sleep is the new sex'. Even if a specific origin for the expression can be identified (and O'Connor, 2007, does so), it is ordinarily used with an awareness of the fact that it is a commonplace expression, and without an awareness of a specific origin.

Our second category was conventional intertextuality, covering acknowledged references and deliberate allusions which conform in terms of marking and modification to the demands of the community of practice within which they are produced. Our last two categories were (3) unconventional and (4) deceptive, where content or language is borrowed without prescriptively required acknowledgement and, respectively, without or with an intention to deceive. Understanding these categories requires an understanding of the demands and expectations of the community in question, so that these conventions become a case in point

for the sort of awareness of textual features required of an LSP professional.

This is all the more necessary because conventions vary across domains. Using Fairclough's categories, Scollon (2004) compares discourse representation, more or less what we call conventional intertextuality, in academic writing, newspaper reports, and advertisements. He finds that the same categories can be applied across what he calls communities of practice, (adopting Lave and Wenger's 1991 terminology), but there are quantitative and qualitative differences. Academics use a very wide range of discourse representation types, with rather little direct quotation. Journalists use direct quotation very much more than academics, but basically restrict their evocation of other voices to marked forms—direct quotation and indirect speech. Advertisers use a very wide range of representations of fictional and fictionalized discourse but do not quote the verbatim utterances of non-fictional individuals. These differences, Scollon argues, are due to discourse representation serving widely different functions in the different communities. He gives the three communities their own voices:

> The academic says: This is what others say. This is what the data say. This is what I say; you should believe me because I am one of us.
> The journalist says: This is what the newsmaker says and isn't it outrageous. Certainly I didn't or wouldn't say that.
> The advertiser says: This is what my client says and you should believe it and act on it. (2004:173)

The academic's position will be the most familiar to many LSP teachers, but as we said initially, it is not the position most commonly encountered outside the academic community. This is significant for two reasons. First, new entrants to that community may be expecting something quite different from what they find and need help with adapting. Second, students completing their studies need to be aware that academics' uses of intertextuality are not likely to be what they encounter outside the academy and they need to be alert for signs of expectations in working life. And to the extent that LSP instruction is intended to equip students with the ability to engage in communicative practices in specific domains, the intertextual practices of those domains may well be an element of course content. We therefore need

descriptions of intertextual conventions in a wider variety of public fields, so that teachers can understand and respond to students' needs.

In this article we examine two aspects of intertextuality in a high-profile business genre with very different conventions from academic writing and from the other text-types examined by Scollon (2004), using a corpus approach and the definitions and framework just presented. We have chosen the genre of the chairman's statement (CS) within the company annual report. This is a well described genre whose intertextuality has not been investigated, and exemplifies a discourse which students may well need to use.

Annual reports are documents which are generally agreed to include instances of several different genres (de Groot 2006) with different registers closely linked intertextually). Chairman's statements (or management's statements) are identified by de Groot (2008) as components of annual reports alongside 'corporate profile' and 'operational review' as other component genres. DeGroot (2008:73) identifies the topics of the Chairman's statement as "personal opinion about (financial) result, management situation, future outlook", its aims as "offering an informative and parental top-line overview of results, contextualizing information in succeeding sections, providing the company with a personal face, establishing reader-writer relationship" and its expected readers as a broad audience with a focus on shareholders.

A key function is impression management (Goffman 1959; Clatworthy and Jones 2006), so chairman's statements are interested texts like house agents' details as opposed to surveyor's reports (Shaw 2006), and are read with the knowledge that they are interested. Like other interested texts, the component genres of annual reports make use of a variety of different discourses (Bhatia 2004), but chairman's statements consistently use what Bhatia calls a 'public relations discourse'. They are public documents and thus may be read or written with other exemplars of the genre from other companies in mind, and can be expected to share their discourse. They are carefully produced, via multiple drafts, with multiple actual authorship, even if there is an individual nominal author (Davison 2011). Chairman's statements are members of (annual) series and thus could be expected to have conventional diachronic intertextual links with previous members of series.

Our aim here is to investigate intertextuality in this genre, using a corpus approach. We use the ample documentation of intertextual links in academic writing (Thomson and Ye 1991; Charles 2006; Swales 1990, 2004; Thomas and Hawes 1994; Hyland 1999) as a heuristic for the investigation of links in this promotional business genre, where we expect a different pattern. Thus we ask questions about the form of reference to the source, the extent of self-citation, the balance of quotation and paraphrase, etc, as well as about the number of shared n-grams and the implications for characterizing the discourse. The variety of intertextual link types revealed by Hohl Trillini and Quassdorf (2010) means that it is impossible to attempt to describe all types in a text collection of any size. We have selected two types for study, one marked and one unmarked.

Given the care with which large companies produce their annual reports, and particularly this key genre within them, the pattern revealed will be the one which is conventional in the genre. Our interest is in the way in which this pattern in business writing relates to the contrasting conventions of the academic domain. For example, templates, allowing the same message to be given in the same words on different occasions, are natural in many domains (e.g., the tax accountants examined by Flowerdew and Wan 2006, 2010) but their acceptability in academic writing is highly contested. At the same time CS need to suggest something unique and essential about the given company. The focus of our investigation is the extent to which these high-stakes, highly crafted, but also very uniform documents make use of or avoid similar language.

2. Methods

Both quantitative/corpus and qualitative/discourse analytical methods were used. A corpus was compiled consisting of chairman's statements from the annual reports of 36 companies, most of which were listed on the London FTSE 100 as of 15 July 2012 (a full list is available in Appendix A). The statements were gathered from the year 2000 onwards, though because the availability of past reports varied, not all years are represented in the corpus for all companies. The corpus consists of 251 statements and just over a quarter of a million words.

An integrative approach (Charles, Pecorari and Hunston, 2010) of corpus and discourse-analytical methods was used. Marked direct

reference was investigated by close reading followed by corpus search. First, some twenty statements from different companies were read through carefully and notes were taken of all intertextual links marked at Hohl Trallini and Quassdorf's highest levels: name, metalinguistic lexical item, and typography. The items that identified the intertextual element were then searched for in the whole corpus. These items included reporting verbs, and the names of specific texts, such as 'last year's report'. This search threw up a large number of examples and reading through these suggested further lexical markers that could be searched for. A new list of markers was drawn up and a second search produced a set of KWIC lines representing a high proportion of the instances of marked direct intertextuality in the corpus, which was then analysed in terms of form of marking and frequency. For the purposes of the corpus investigation we did not attempt to analyse noun uses (although, as noted above, we used nouns as search terms) and the focus of our quantitative study is on instances of intertextuality with reporting verbs.

Intertextual relationships among the statements were searched for by means of identifying n-grams, that is, strings of words of length *n* which appear in more than one text, extracted with the AntConc concordancer (Anthony 2007). Because the statements contain a great deal of financial information, the process of cleaning the corpus included standardising the use of symbols and words for 'dollars' 'pounds', etc., and substituting numbers with a placeholder, so that phrases such as the one in extract 1a and 1b could be indentified.

> Extract 1a: The Board is recommending a final dividend of 3.35 pence per ordinary share (Aggreko 2002, p. 11)[1]

> Extract 1b: Board is recommending a final dividend of 3.45 pence per ordinary share (Aggreko 2002, p. 4)

N-grams are not necessarily indicative of a template writing strategy. They have normally been investigated (e.g., Biber, Johansson, Leech, Conrad & Finegan, 1999; Ädel & Erman, 2012) to make rather the opposite point, namely that the very frequent ones, while represented

[1] Extracts from Chairman's statements are identified by the company name and the year of the report. Details are in Appendix 1 and all are available on line.

orthographically as multi-word units, have some of the characteristics of single lexical items. However, lexical bundles are relatively short units; most frequently studied are 3- and 4-word bundles, which according to Biber et al.'s (1999) criteria must occur ten times per million words and across five separate texts to qualify for bundle status. Five-word bundles are so much rarer that the frequency criteria are relaxed. If significantly longer n-grams are found, then that is likely to be indicative of copying, rather than phraseological status for those units[2].

The corpus was searched for n-grams occurring at least twice, from 100 words (the maximum permitted by AntConc) to 30 words. Since longer n-grams contain shorter ones, as longer strings were identified, the statements in which they appeared were removed from the corpus, so that results for shorter strings were entirely fresh. The result was a list of groups of statements with at least one shared chunk of language among them. These were then analysed manually for similarities and differences in content, structure, organisation and phraseology.

3. Results

In this section we report the results of our investigation of marked and unmarked intertextuality in the corpus.

3.1 Direct intertextuality

Close reading of a sample of statements revealed that explicit word-for-word quotation is quite unusual (as it is in academic writing in many disciplines). It occurs in occasional citation of slogans to identify advertising campaigns by retailers (sixteen instances retrieved from the corpus by our procedure), as in Extract 2.

> Extract 2: a relationship summed up so well by the 'your M and S' campaign (M & S 2006)

[2] It should be noted that no generally applicable threshold exists to indicate the point at which a string is so long that its presence in two texts indicates repetition rather than coincidence. However, all other things being equal, the greater the similarity between two texts, the more likely that one is based on another.

Otherwise, intertextual reference involved paraphrase or simple naming of documents. The close reading phase showed that explicit references to other texts were signalled by using nouns referring to a (folk-)genre or verbs referring to a speech act of some kind. Some of these are comparable in level of precision to references to sources in academic texts. Extract 3 contains both elements in a very complete form, such that there is unequivocal reference to a definite source with a definite author.

> Extract 3: In my half year statement I reported that NAME had retired from the Board on 18 April. (ABF 2007)

In Extract 3 *My half-year statement* gives the date (six months before the present) and author ("my") of the text referred to, and in this respect is equivalent to an academic reference of the Name-Date type. One striking difference is that this example gives the genre of the cited text along with the citation (rather than showing it in conventionalized form in a reference list). The source author is a syntactic constituent of the sentence and so in the terms used for academic writing it is an integral reference (Swales, 1990). However, because the genre cited is given in the text, the actual referring structure is of the form "In (X's) 2006 statement, X reported …" which is not typical of academic citation.

Sometimes prototypical citations of this kind seem to refer to a third text, as in Extract 4.

> Extract 4: In my report last year I detailed our plan for restoring the fortunes of Marks and Spencer (M & S 2002).

Here we are given the genre (*report*), author (*my*) and date (*last year*) and a paraphrase of content (*our plan for*) introduced by a speech-act verb (*detailed*). But this content itself refers to something (*plan*) which might be a text. A related form is exemplified by Extract 5.

> Extract 5: In November we announced our plan to sell our European vending business Selecta As. (Compass 2006)

Here something that might be a text (*plan, decision*) is the object of the speech act verb. The announcement is a cited text and if the plan or decision is to be regarded as a text, the plan or decision itself is another.

For the announcement, author, and date information are given, as well as a paraphrase of content. The genre information, if that is what it is, refers to the text announced not to the announcement (which may have been in the press release genre, for example). Alongside these quite full citation forms, there are others which only realize parts of this 'full' form, and cannot be directly compared to academic references. It is common for references of this kind to refer to a dated group of texts/utterances (Extract 6):

> Extract 6: However, as we said throughout the second half of 2007/08, consumer budgets are clearly under pressure (Sainsbury 2008).

Others have a reporting verb without either explicit genre or date (Extract 7):

> Extract 7: … providing more delivery choices, something customers have said is important to them (M & S 2011)

Words like *decision, plan, agreement, settlement* often occur without a reporting verb. Here there is a kind of cline of intertextuality. In Extract 5 above, for instance, *plan* might refer to a document or it might simply mean 'intention'. Sometimes it is likely that what is being referred to is a text. In Extract 8 the word *decision* probably refers to an instance of the genre 'court decision'

> Extract 8: the recent appeals court decision to reject the US federal government's US$280 billion claim against the US tobacco industry is obviously encouraging (BAT 2004)

However other cases of the use of the words *decision* cannot be said to refer to specific texts or utterances. In Extract 9 it is not a text which is regretted although obviously the decision was expressed in words and in that sense makes the text polyphonic.

> Extract 9: we regret her decision to leave and thank her for the significant contribution. (Whitbread 2007)

Intertextuality permeates all texts and it would be impossible to catalogue every possible manifestation in our corpus. The focus of our

quantitative study is therefore on instances of intertextuality with reporting verbs.

Neither the close reading nor the automatised corpus search produced any instances of quotation from literature or other canonical sources or of phrases like *according to*. That is, where a named source for a statement was given, it was always associated with a reporting verb. The two remaining categories for investigation were therefore direct quotations with some kind of typographical indication and 'reported speech' with a reporting verb.

The only direct quotations that could be examined via the corpus were those presented in quotation marks, and there were few of these. A handful of the statements included a genre-breaking section cast as an interview with the Chairman and CEO, and ten utterances in one of these were presented as direct quotations from an oral interview. Otherwise nearly all the quotations found were in statements from retailing or banking companies, and many were used as the names of campaigns of various kinds, as in Extract 2. Extract 10 gives a further example from the sixteen different quotations all of which refer to phrases which must have been instantiated in very many earlier advertising, marketing, and internal texts (the phrase has 779 hits on Google).

> Extract 10: … running marketing campaigns such as 'feed your family for a fiver' (Sainsbury 2009)

The list of reporting verbs investigated is neither exhaustive nor uniform: some verbs are clearly signals of intertextuality, others more marginal. Table 1 lists the verbs found in instances of intertextual and intratextual reference. (These verbs occurred equally frequently as metalinguistic rather than intertextual devices allowing evaluative comments *I am delighted to announce that.* Such instances have been excluded.)

Table 1. Reporting verbs functioning intertextually found in the corpus

announce	161
say	51
report	39
agree	35
publish	29
welcome	28
state	22
write	19
discuss	15
ask	12
sign	10
tell	8
submit	7
note	5
inform	3
amend	2
observe	2
quote	2
express	2
TOTAL	452

Table 1 shows that the corpus search for verb forms found 452 cases where there was clear reference to another text (in the vast majority of cases) or to another part of the Annual Report in question. While there are probably a comparable number of intertextual references where the indicator of intertextuality is a noun and some where a verb not searched for is used, one of the main findings of our survey is that explicit intertextuality is relatively infrequent in these texts. Instances marked by one of the verbs chosen occur at an average rate of less than 2 per statement (0.84 per thousand words), and overall 3 instances per statement (about 1.5 per thousand words) would be a reasonable estimate of frequency, confirming the impression from the close reading. By contrast Hyland (1999) found 10.7 citations (of a different form) per 1000 words of running text, as an average for all disciplines, in his RA corpus.

The sample is dominated by the fairly general verbs *announce*, *say*, and *report*. Instances of these verbs make up more than half the total found. Since each verb has idiosyncratic uses and for some (like *agree*) it is not clear when the reference is intertextual and when it is not, it is these three which are examined more closely to get a quantitative picture

of explicit intertextual reference in this corpus. Table 2 classifies the instances according to the presence or absence of a precise date which would enable retrieval of the text referred to, and by the source cited – the logical subject of the reporting verb. Three instances of *report* and ten of *says* are omitted because they were intratextual, referring in the cases of report to other sections of the Annual Report, and in those of *says* to 'speakers' in the genre-breaking text presented as an interview.

Table 2. Instances of intertextuality with reporting verbs, by source of utterance and dating type

	Specified date	Vague or unspecified date
In-company source	140 (of which: *we* =81*)*	91 (of which *we* = 44)
Outside source	2	14

Table 2 shows that intertextual reference in Chairman's Statements is overwhelmingly to texts produced in-house. The few outside sources are regulatory organizations (*the European Commission, the OFT*), political actors (Extract 11) or unspecified debaters (Extract 12).

> Extract 11: this policy was announced by the Chancellor of the Exchequer in the June budget. (RBSG 2010)

> Extract 12: Turning to broader societal issues, a great deal has been said in recent months about the role of bonuses in the banking system. (Lloyds 2008)

It is mostly *we* who *announce* and *report* things, while *I* is quite often the subject of *say*. *The group, your Board*, and the names of units within the company are common sources too. The names of individual company employees occur mainly when they announce their retirement, that is most achievements are presented as collective.

In academic writing self-citation is also a common feature. In a study of the citations of eight prominent researchers, White (2001) found that the author whom each re-cited most frequently was in fact him- or herself. However, there were still many more citations to the cumulative works of all the other scholars they cited. In addition, in academic writing self-citation often has a self-effacing quality; first-person references do occur in academic texts (Hyland, 2003), but it is also common for a writer to cite him- or herself by surname and in the third person, precisely as other authors are cited. In the present corpus there are no instances of this type. This difference reflects not only the genre

but also the topic—one purpose of the CS is to review what 'we' have been up to in the last year.

The quantitative analysis (Table 2) confirms that a majority of intertextual references are rather specific in terms of source document date (and therefore retrievability), as in Extract 3 above. Even where the date is vague or unspecified the instance often refers to specific documents, very often using phrases like 'as previously reported'. Other instances refer to purported multiple texts (Extract 13):

> Extract 13: our aspiration … remains achievable, although, as we have repeatedly said, there may be peaks and troughs along the way. (Aggreko 2010)

As noted above, an outsider such as a reader from the academic discourse community is struck by intertextual episodes in which the the genre of the source text is specified (*In my 2009 report*, as in Extracts 3 and 4), and/or the subject of the source text is a third text (*We announced a plan* as in Extracts 5, 6, and 7). Although quite normal, such cases were not particularly frequent in the corpus as a whole.

3.2 Lexical similarity

The previous section demonstrated that the chairman's statements contain relatively little intertextuality in the form of direct and explicit references to other texts. However, the analysis of n-grams revealed a great deal of intertextuality in the form of chunks of language which co-occur across the statements. Units of at least 30 words, shared by two or more statements, were found in the annual reports of 24 of the companies (see Figure 1 for an example). In all cases these were in different annual reports from the same company; that is to say, there were no cases of a chunk of this length appearing in the reports of two different companies. Here too, intertextuality is an in-house affair.

Using a minimum frequency of two occurrences, the corpus contains 1,196 30-gram types and 2,797 tokens. In other words, nearly 84,000 words, or one third of the running words in the corpus, are part of a 30-gram which occurs at least twice. When a more restrictive minimum frequency of five tokens is applied, the corpus is nonetheless found to contain 27 types and 198 tokens, or 780 per million words. This exceptionally high frequency speaks to the extremely formulaic nature of this genre.

It should be noted that these frequency figures are not truly comparable with those for lexical bundles found in larger, general corpora (e.g., Biber et al. 1999). In such corpora lexical bundles demonstrate that some multi-word units co-occur with such regularity that they can be considered to have some of the properties of orthographic words. When examining texts from a particular domain, however, the frequent occurrence of very long strings of words does not attest the word-like nature of the strings; rather it indicates that the writer of a given statement was influenced by the earlier statements.

Despite the earlier caveat about the difficulty of establishing a numerical threshold which can be considered indicative of repetition rather than autonomous composition, we maintain that the presence of a string such as the one in Figure 1 below in two texts strongly suggests that it was copied (in-house) from one into the other.

The Group's underlying profit, which we define as profit before taxation, exceptional items and amortisation of intangible assets, was [X] million pounds compared to [X] million pounds in [year]. This represents underlying earnings per share, on a diluted basis, of [X] pence …

Figure 1. A 42-gram, found in ABD 2006, 2007, 2008

To the extent that this part of the investigation was designed to understand whether earlier chairman's statements are used as templates for later ones, that inference was fundamental. The fact that there are many, long shared strings of text, and that they comprise a large proportion of the corpus as a whole is, we argue, evidence for templates and repetition in the production format for these texts.

This conclusion is supported by a qualitative analysis of the statements. Across companies, the statements show considerable regularity of content and rhetorical structure, suggesting that it is a well established and relatively clearly defined genre. In addition, within the same company, similarity of topic, structure and phraseology can be seen. A comparison of successive years' statements shows signs of clear development from one year to another. For reason of space constraints, we will illustrate this common pattern with reference to the chairman's statements of a single company.

Aggreko is a FTSE-100 company which 'provides power and temperature control solutions to customers who need them either very quickly, or for a short or indeterminate length of time' (Annual Report

2011, p. 7). The Aggreko chairman's statements which are included in the corpus date from 2000-2011, inclusive, and are on average 1421 words in length. During this period, two chairs' names appeared at the end of the statements, one in 2000 and 2001, and one beginning in 2002 through 2011.

The statements for that period are intertextually linked by covering a range of topics typical for this genre as illustrated in Figure 2 (see also de Groot 2008: 73).

1. Overview of some of the year's salient activities and projects
2. Statement of the company's strategy and objectives
3. Summary of financial performance, e.g. trading performance, revenue, return on capital
4. Overview of funding, e.g., debt, capital expenditure, etc.
5. Information about dividends and other information for shareholders
6. Statement of appreciation of the company's employees
7. Review of changes to the board and senior management
8. Statement about ethical concerns
9. Statement about the outlook for the company in the coming year
10. Chairman's signature and date

Figure 2. Thematic sections in CSs[3]

The presence of these topics, the order in which they appear and the level of detail given to them are regular but not fixed. For example, every statement begins with a paragraph mentioning some of the highlight events of the year, but in some statements (e.g., 2002) this extends to more than one paragraph and in some (e.g., 2000), the theme recurs after other subjects have been dealt with. In no case does appreciation of the company's employees receive more than one paragraph, and it is absent from several statements. Information about financial performance can come at the beginning, middle or closer to the end. A statement about ethical issues appears only in 2010 and 2011.

Despite this variation, the statements form a coherent body, as witnessed by the fact their content falls comfortably under the same set of headings. This generic coherence demonstrates that the writers of the statements have a clear awareness of the relatively sharp constraints

[3] Although we are not making a formal genre analysis in this paper, it has not escaped our notice that these rhetorical functions and their realisations resemble moves and steps in a Swalesian sense.

which dictate appropriate and desirable content, and suggests that their understanding of appropriate content is guided by earlier statements.

The second conclusion is supported additionally by the phraseological similarities across the statements which is evidence for a 'template' composing strategy. Two points about the phraseological likenesses need to be made. The first is, simply, that they are numerous and occur in all thematic sections: there are many long, identical or very similar strings of language among the statements throughout the texts. In Table 3 below, the numbers in the left-hand column refer to the section of the statement (from the list above) and the year from which the quotation is taken appears in brackets after the quotation. Italics are used to highlight differences between the two years, where they occur. For the sake of space, only two instancess of each chunk are given; this does not mean that they appear only twice in the corpus.

The second noteworthy point about the language of the statements is the evolution across them. As Table 3 shows, some co-occurring chunks of language feature variation. In some cases this is due to the cyclical nature of the reporting process: a change which is announced one year may be the subject of evaluation or follow-up in a later year. Thus, in row 8, a change is announced in 2010 ('the Board has now taken the further step…') and reviewed the following year ('Last year the Board took the further step…'). In other cases, though, the changes appear to be motivated more by a desire to vary and paraphrase than any need to adapt earlier phrasings to a new context; in row 9, for instance, there is no clear necessity to transform 'limited visibility with respect to the outcome' to 'limited visibility of the likely out-turn'.

Table 3. Examples of repeated chunks

1	Introduction I am pleased to report that Aggreko has delivered another strong set of results. *[2010]*	Introduction I am pleased to report that Aggreko has delivered another strong performance in 2011… *[2011]*
2	As a company Aggreko is totally committed to enhancing shareholder value by delivering consistent growth in quality earnings through an ever expanding range of added value services focused on solving customers increasingly complex temporary power temperature control and oil free compressed air requirements around the world. *[2000]*	As a company Aggreko is committed to enhancing shareholder value by delivering growth in quality earnings through an ever expanding range of added value services focused on solving customers increasingly complex temporary power temperature control and oil free compressed air requirements around the world. *[2001]*
3	Amongst our businesses, International Power Projects once again performed extremely well: trading profit grew by 69.6% in constant currency on revenue which was 26.2% ahead on the same basis excluding pass-through fuel[3]. *[2009]*	Amongst our businesses, International Power Projects grew revenue in constant currency and excluding passthrough fuel[3] by 8%, and recorded the highest level of order intake in its history. *[2010]*
4	Net debt increased to £102.9 million (2004: £82.1 million), largely as a result of increased capital expenditure of £80.2 million (2004: £56.1 million). Over 90% of this capital investment was spent on our rental fleet to support the strong growth in the business. Looking ahead we estimate that fleet capital investment in 2006 will be around £120 million. *[2005]*	Net debt increased to £205.2 million (2005: £102.9 million), largely as a result of the GE Energy Rentals acquisition and increased capital expenditure. Around 90% of this capital investment was spent on our rental fleet to support the strong growth in the business. Looking ahead we estimate that fleet capital investment in 2007 will be around £140 million. *[2006]*
5	Dividend The Board is recommending a final dividend of 5.02 pence per ordinary share which, when added to the interim dividend of 3.04 pence, gives a total for the year of 8.06 pence, a 20.0% increase on 2006. *[2007]*	Dividend The Board is recommending a final dividend of 6.28 pence per ordinary share which, when added to the interim dividend of 3.80 pence, gives a total for the year of 10.08 pence, a 25.0% increase on 2007. *[2008]*

Table 3 continued. Examples of repeated chunks

6	Employees Once again I have been extremely impressed by the commitment and professionalism of all our employees, especially in this challenging economic environment. *[2008]*	Employees Once again I have been extremely impressed by the commitment and professionalism of all our employees, especially in this challenging economic environment. *[2009]*
7	At the start of the new financial year a number of new senior management appointments were made. On 1 January 2001 Phil Harrower was appointed Group Managing Director… *[2000]*	At the beginning of 2001 we announced a number of new senior management appointments including that of Philip Harrower as Group Managing Director. *[2001]*
8	Ethics Committee Integrity and honesty in all our business dealings are central to Aggreko's reputation and long term success. For many years the Group has had a clear and robust ethics policy, and strong related procedures; the Board has now taken the further step of establishing a committee… *[2010]*	Ethics Committee Integrity and honesty in all our business dealings are central to Aggreko's reputation and long term success. For many years the Group has had a clear and robust ethics policy, and strong related procedures. Last year the Board took the further step of establishing a committee . . . *[2011]*
9	As is always the case at this time of year, we have limited visibility with respect to the outcome for 2005. *[2004]*	As ever at this early stage, there is limited visibility of the likely out-turn for the current year… *[2005]*

Thus, even as the similarities between statements are clear, so is their evolution, with the result that while points of phraseological identity or similarity can be found between any two years, 2011's statement differs substantially from 2000's. This evolution is shown in Table 4, which shows the formulations used to hedge the predictions for the coming year.

What this analysis demonstrates is such a high degree of interrelatedness among the CS as to suggest a production strategy of using one year's statement as a template for the next. In the academy a strong emphasis in teaching student writing is placed on autonomous expression (Pecorari 2008). On the basis of these findings, that is not the common working practice of writers in the workplace, or at least not those called upon to produce this particular genre.

Table 4. Evolution in hedging statements

2003	at this early stage of the year and subject to exchange rate variations…
2004	As is always the case at this time of year, we have limited visibility with respect to the outcome for 2005.
2005	As ever at this early stage, there is limited visibility of the likely out-turn for the current year…
2006	…so it is always difficult at this early stage to predict the year's performance.
2007	Looking ahead, at this early stage it is always hard to come to a definitive view of the outcome for the year as a whole, and particularly so when faced by the current level of uncertainty about the future direction of the various economies…
2008	It is always difficult at this early stage to come to a definitive view of the likely outcome of the year, and never more so than in the current economic environment.
2009	It is always difficult at this early stage to come to a definitive view of the likely outcome of the year, and never more so than in the current economic environment.
2010	The current instability in some countries in the Middle East and Africa makes the task of predicting the outcome for the year more than normally difficult;

It must be acknowledged that in this section we have used textual evidence of similarity among the statements to deduce an intertextually influenced writing process. Sceptical readers may believe that some or all of the similarity documented here is coincidental, due to these statements' common purpose, necessarily similar content, discourse community-specific language, and in some cases indentical authorship.

While acknowledging that, by virtue of our method of analysis, the evidence for a template writing strategy presented here is circumstantial, we also believe it is strong. However, a more relevant point may be what intertextual similarity tells us about the nature of the written product. Writing demonstrably produced with a template strategy would presumably exhibit a degree of intertextuality approximately equivalent to that found here; therefore a template strategy would appear to be a useful one for writers aspiring to (learn to) produce exemplars of this genre, whether or not such a strategy has actually been used here.

4. Discussion

The present investigation examined two sorts of intertextuality—explicit reference and recycled phrasing—in an important business genre. While revealing that intertextuality is a pervasive feature of this genre, the

findings have also demonstrated that in terms of its frequency, form and the inferred process, this genre differs substantially from academic genres.

Academic texts make prolific use of direct, identifiable references to earlier texts, and writers are expected to demonstrate that they have read widely on their topic, something which—despite the prevalence of self-citation—means incorporating other voices than the author's own. However, in the CS, other texts referred to are primarily the earlier utterances of the chairman himself[4], a text produced by the company, or a first person plural source which is or must be inferred to be the corporate body. The references in these statements are therefore inward-looking in a way which would not be conventional in academic writing.

The format in which citations are made is rigidly dictated by convention in academic writing, with broad similarities across academic texts and absolute uniformity required within a single publication. Bibliographic information is detailed, in order to permit readers to verify the claims writers make on their source authors' behalf. Here too the CS has a different profile. While many of the references in this corpus provided information similar to that found in academic texts—authorship, date, genre—the presentation of this information was simultaneously less detailed and less conventionalised in presentation.

A further important difference lies in the processes by which some of the intertextual relationships must be presumed to have come about. Evidence was presented above suggesting that a prior year's statement serves in many cases as a starting point for producing the current year's. This is directly at odds with expectations for academic writing. Authors who recycle portions of their earlier publications are frowned upon. For example, in a guide prepared for the Office of Research Integrity, a part of the US federal government, Roig (nd) places the practice of recycling a description of research methods from one paper to another under the heading '"Borderline"/unacceptable cases of text recycling' (p. 23) and cites an editor of an academic journal who characterises such a template approach as self-plagiarism.

Researchers who publish the words of *other* authors without explicitly marking them as quotation and identifying the source are

[4] We use the masculine pronoun advisedly here, as all of the chairmen who signed the statements making up this corpus were male.

labelled plagiarists. Student writers who engage in either of those practices in assessment writing may find themselves charged with collusion or plagiarism. Positive prescriptions for carrying out an assessment writing task—such as those given by teachers of English for Academic Purposes—involve starting with an independent task conception and creating an original text to match the purpose. A template approach to academic writing would thus miss the mark in several ways.

Descriptions of the features of academic genres have observed that the superficial differences have their basis in the values and substantive practices of the communities in which they are produced. For example, the fact that integral citation is more common in the humanities than in the natural sciences is often attributed to the fact that the knowledge claims made in the latter area are (supposed to be) subject to verification and reproduction, and thus their source is relatively less important, while knowledge claims in the humanities tend to be inherently contestable, and thus can be evaluated more easily when their human source is identified and taken into account (Hyland 1999).

The intertextual practices found in the chairman's statements can similarly be interpreted in terms of the texts' rhetorical purposes and role within the discourse community. For example, an explicit reference in APA format to 'feed your family for a fiver' would be unnecessary on at least two grounds—nobody is likely to want to consult the source, and it has been publicised widely enough already to be familiar to readers of the statement—and, for the latter reason, it would be very difficult, if not actually impossible, to identify such a thing as an original source.

The objective of LSP instruction is to provide the set of knowledge and skills needed for for the specific communicative events which are characteristic of a particular domain. The LSP practitioner must therefore possess an awareness of the genres within a domain and the features which characterise them. If this awareness is not based on the teacher's personal knowledge of the domain, then s/he needs access to empirically based descriptions. This investigation of a widespread discoursal feature—intertextuality—in a particular domain—business texts—is a contribution to that descriptive project.

The different practices reflect different text functions and different conditions for text production and reception. In the context of higher education, assessment of writing skills is often done through the traditional academic genres such as the essay. The assessment criteria for

such texts are well established and quite specific. With regard to intertextuality, good practice includes reading widely and citing a range of sources to support an independently developed argument. Students are instructed in, and expected to develop proficiency in formal features such as reporting verbs (distinguishing between 'Smith states' and 'Smith suggests'), mechanics (i.e., APA versus MLA, etc.) and other highly conventionalised aspects of source reporting. Original work is prized; unattributed source-dependent work is prohibited. However, these are neither the conventions of the lifeworld the students come from nor those of the professional worlds most of them go to.

The findings of this study suggest that LSP instruction in higher education contexts may present a problematic meeting ground for the practices of different domains in at least two ways. Students arrive at university with a great deal more exposure to the generic and discoursal practices of visible, public domains such as advertising and journalism, than they have to those of academia. Some students may have experience of the workplace, and exposure to the communicative practices of additional domains. Their beliefs about appropriate intertextuality practices do not equip them effectively for what they will encounter at university. The problematic areas may actually be intensified by the fact that students are not tabulae rasae; the knowledge base they bring from other areas may make it more difficult for them to see the the new knowledge they are required to assimilate.

A second area of difficulty arises when students of, for example, engineering, information technology, or natural sciences have completed a period of study and go into the workplace armed with what they have learned about how to write in university contexts—knowledge which, on the basis of the evidence presented here, will not easily transfer to workplace writing tasks.

This is problematic in the context of the current emphasis that is placed in western countries on employability as an outcome of tertiary education. The Joint Declaration of the European Ministers of Education of 1999 (the 'Bologna Declaration') proposed radical changes to the organisation and administration of higher education in Europe 'in order to promote European citizens' employability and the international competitiveness of the European higher education system' (1999: 3), a goal which was ratified by the Communiqué of the Conference of

European Ministers Responsible for Higher Education as recently as 2009:

> With labour markets increasingly relying on higher skill levels and transversal competences, higher education should equip students with the advanced knowledge, skills and competences they need throughout their professional lives. (2009: 3)

Students whose professional work may require them to write texts in an environment like that of the chairman's statements would be better prepared if features such as the use of templates, promotional referencing style, etc. were placed as foils to academic-writing patterns rather than ignored. As noted above, it is likely that students bring with them to the university intertextuality patterns which clash with academic norms but are actually standard elsewhere, and this prior knowledge should be acknowledged and made use of.

We do not wish to suggest that resolving this clash of writing cultures is the primary purpose of LSP instruction, nor that doing so entails abandoning academic genres in favour of those used in the workplace. However, to the extent that such sharp differences have been shown to exist, effective LSP instruction should be based on a conscious and principled decision about which genres to teach and assess, rather than an assumption by default in favour of academic genres.

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Appendix A

Company	**Years (date of report)**
Alliance Boots	2011
Aberdeen Asset Management	2004 2011
Admiral Group	2004-2011
Aggreko	2000-2011
Associated British Foods	2006-2010
Barclays	2001-2011
British American Tobacco	2003-2011
BP	2011
BskyB	2005-2011
Burberry Group	2005-2007, 2009-2011
Compass Group	2006-2011
Diageo	2007-2011
Experian	2007-2012
Fresnillo	2008-2011
GlaxoSmithKline	2002-2011
HSBC	2011
International Tobacco Group	2000-2011
John Lewis Partnership	2007-2011
Kingfisher	2000-2001, 2005-2012
Lloyds Banking Group	2000-2011
Marks and Spencer	2001-2008
Morrisons	2004-2011
Next	2004-2010
Old Mutual	2000-2011
Pearson	2006-2011
RBSG Royal Bank of Scotland Group	2000-2011
RBSH	2010-2011
RE Reed Elsevier	2008-2011
SAB Miller	2000-2011
Severn Trent	2006-2011
Tesco	2011
United Utilities	2008-2012
Vodafone	2000-2012
Whitbread	2000-2007, 2009
W.H.Smith	2005-2011

The presence and roles of English in Swedish print advertising: An exploratory study

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Abstract
Despite the ubiquity of English in the Nordic societies, little attention seems to have been paid to the presence of English in advertising texts. Thus, the present study aims to survey the reality of the use of English in Swedish print advertising. A sample of advertisements published in Swedish magazines from different market segments is examined. Drawing on genre analysis and advertising research, this paper looks at the actual presence of English in this genre, at the moves that include English words and phrases, and at the values evoked by those expressions. The results suggest that English may not be so pervasive after all. Some of the roles and functions performed by English are discussed. Finally, questions to be addressed by future studies are presented.

1. Introduction

It is generally acknowledged that "English has a special position in the world as a global or international language" (Aijmer and Melchers 2004: 1), and its use in advertising stands out as a common practice worldwide. This seems to be motivated by two main reasons. First, with increasing internationalisation taking place, audiences are not always homogeneous in terms of language, and the use of English caters for those unable to understand the local language (Pahta and Taavitsainen 2004: 172). Second, the introduction of foreign words and phrases in the discourse of advertising has been traditionally resorted to as a means of attracting the audience's attention, and it seems that English is particularly effective in this sense (Berns 2009: 196).

Thus, English in commercial communication has been widely explored internationally (e.g. Gerritsen et al. 2000; Yueng-Ying 2000; Planken et al. 2010; Petéry 2011; Ruellot 2011), particularly in connection to the globalisation processes that bring local products to the global arena. Two main topics of interest have been identified, i.e., on the one hand, the use of English as a facilitating tool for implementing the same campaign in different countries, and, on the other hand, the combination of English and the local language(s) to achieve certain

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effects, for example drawing connections between values typically associated with the English language and the product being advertised.

The second issue, i.e. the mix of English and the local language(s) in a single message, has been explored in relation to several languages of the world, such as French, Dutch, Japanese, Spanish, or Italian. These studies have focused on two different levels, namely (a) the microlinguistic level, specifically the morphological, syntactic and semantic strategies used to incorporate English words and phrases into the discourse in the local language; and (b) the macrolinguistic level, namely, how mixing English and the local language affects the text in terms of author, audience, and purpose (Piller 2003: 171-172).

In the Nordic countries, English seems to be particularly ubiquitous, and some scholars (e.g. Hult 2012; Sharp 2007; Taavitsainen and Pahta 2003) claim that English should no longer be considered a second language since its use has extended to the intranational level, and it is not uncommon to come across combinations of English and the local languages in different contexts. For instance, Pahta and Taavitsainen claim that even "those Finns who are not actually involved in international affairs are also heavily subjected to English through the mass media, being thus passive consumers of the language" (2004: 167). Nevertheless, the presence and functions of English in advertising messages has not been fully explored yet.

Previous studies have touched upon the integration and assimilation of English words at the microlinguistic level in the Nordic region (e.g. Stålhammar 2004; Sharp 2007). However, it seems that the study of the role of English at the macrolinguistic level has received less attention, and only a few publications have tackled the issue. For instance, Pahta and Taavitsainen (2004) carried out a diachronic study of the use of English in advertisements from the yellow pages in Helsinki over a period of fifty years. Their main findings indicate that English is often used to incorporate connotations of modernity and/or high living-standards. Furthermore, their results highlight the fact that some of the expressions used by Finnish advertisers imitate English but do not comply with the conventional ways of expressing those ideas as used by native speakers. In the case of advertising in Sweden, Larson explored job advertisements concluding that English is mainly used as a carrier of certain values that make the job "sound more appealing and challenging" (Larson 1991: 368). However, it seems that little attention has been paid

to the actual presence of English in purely commercial texts, i.e. advertisements for goods and services, considering the seemingly substantial influx of English in the Nordic societies (Gottlieb 2004: 41).

Thus, the present study surveys the presence and role of English words and phrases in a sample of Swedish print advertisements. More specifically, the following research questions are addressed:

1. How much English is there in Swedish print advertisements?
2. Which part(s) of the message are more likely to contain English?
3. Which values are attributed to the products through English words or phrases?

2. Material and method

For the purposes of this investigation, a corpus of magazine advertisements collected in 2012 is used. The Swedish Magazine Publishers' Association *Sveriges Tidskrifter*, one of the largest media organisations in Sweden, has been consulted so as to obtain information regarding the Swedish magazine market. When compiling the sample, two main issues have been particularly relevant, namely, the inclusion of different market segments and the selection of publications with high market shares. A variety of publications targeting different audiences has been included so as to gain insight into the situation in broad terms. This, in turn, may help identify specific aspects of interest for future studies.

Sveriges Tidskrifter lists 38 market segments. However, some of these segments have been found to occupy highly specialised niches, while other segments only contain publications with comparatively low market shares. Thus, the magazines with the highest market shares in numbers of copies in 2011 have been identified, as these were the most up-to-date statistics at the time. Then, 10 of those magazines have been selected; they all represent different market segments (see Table 1).

Regarding the theoretical foundations for this study, my approach draws mainly on genre analysis and advertising research. On the one hand, genre studies provide "a variety of frameworks used to analyse a range of textual genres constructed, interpreted and used by members of various disciplinary communities in academic, professional, workplace and other institutionalised contexts" (Bhatia 2002: 12). Among those frameworks, research on move analysis has generated tools to study the

prototypical moves contained in a specific genre, as well as the functions carried out by them.

Table 1. Magazines selected for this study and their market segment

Magazine	***Market segment***
Hemma i HSB	*Home & garden*
Dagens Arbete	*Industry, technology & craftsmanship*
Lärarnas Tidning	*Public sector & education*
Svensk Golf	*Sports, exercise & health*
ProPensionären	*Recreational & cultural*
Allers	*Family*
Turist	*Travel*
Motor	*Motorcycles & cars*
Femina	*Women's magazines*
Dator	*Computers*

Thus, Bhatia's work on the schematic structure of print advertisements (2004, 2005) is used in this study. The model identifies six moves and their functions (see Table 2), which may shed some light on the role of English in each text in the sample. For instance, if used in the headline, English may catch the readers' attention; however, if used in the copy, English could make the details about the advertised product available to members of the audience who cannot understand the local language. Thus, for each advertisement in the sample, the move in which English appears is documented. The function typically performed by that move is then considered in the interpretation and discussion of the findings. It is important to note that the schematic structure identified by Bhatia is not rigid, and variation can be expected. In particular, it is not uncommon to find hybridity or omissions of certain moves.

Table 2. Schematic structure of print advertisements (Bhatia 2004: 59-65; 2005: 213-225)

Move 1: Visuals/ reader attraction	The visual elements are generally crucial in terms of catching people's attention. These might include photographs, drawings, or graphic accessories, such colour backgrounds, borders, etc.
Move 2: Headline	The headline is usually the most important element along with the visual elements. Typically, it includes the slogan or catchphrase.
Move 3: Lead	Some adverts include a subhead or lead that briefly expands the main headline. Sometimes it becomes the slogan. Its main objective is to justify the product by establishing a niche.
Move 4: Copy	The copy is the main text of the advertisement. This move can present different realisations, namely: • Detailing the product, • Establishing credentials, • Endorsement or testimonials, • Using pressure tactics, • Soliciting response.
Move 5: Signature	The signature provides the advertiser's details, i.e. logo, advertiser's name, address, geographical situation, website address, etc.
Move 6: Coupons/ offering incentives	Coupons and other strategies attract the audience's attention and may raise their response by offering an incentive.

On the other hand, within the field of advertising research, studies in the area of content analysis focus on the way certain values are encoded in this type of commercial communication. This line of research contributes to the present study by providing the theoretical background and the tools needed in order to explore whether English is used to insert certain values in Swedish print advertisements. In this sense, any patterns identified in the sample could indicate that certain values, collectively associated to the English language, are being transferred to the publicised products or services in order to make them more attractive in the eyes of the prospective consumers. Previous studies (e.g. Pahta and Taavitsainen

2004; Larson 1991) have identified this strategy in other types of persuasive communication, which suggests that certain values associated to the English language are sometimes transferred to the advertised products or services.

In particular, Pollay's list of appeals (1983) is used as a model of analysis in the present paper. This model, despite having its origins in the early 1980s, has had a significant impact on advertising research, and is still widely used (e.g. Zandpour, Chang & Catalano 1992; Albers-Miller & Gelb 1996; Göllner 2003; Singh & Matsuo 2004; Okazaki & Alonso 2005; Lee et al. 2011; Tsai and Men 2012; Zarantonello et al. 2012). Pollay's model is formed by 42 categories, each of which represents a value—conceptualised by Pollay as *appeal*—that can be inserted in a commercial message so as to attach that particular value to the product itself with the intention of enhancing the product's desirability in the eyes of the consumer. Appeals are not mutually exclusive, that is to say, any given advertisement may contain more than one appeal. Each one of Pollay's appeals is presented along with a list of adjectives and phrases that give linguistic form to that specific value (see example in Table 3[1]). The terms listed under each appeal belong to the same semantic field. Besides, the model also considers other linguistic and visual strategies that bring these meanings into the message in an implicit fashion.

Table 3. An example from Pollay's list of appeals (1983)

Appeal	***Possible realisations***
Healthy	*Fitness, vim, vigour, vitality, strength, heartiness, to be active, athletic, robust, peppy, free from disease, illness, infection, or addiction.*

Thus, the study makes use of mixed methods for the data analysis, which is organised in three phases. First, the magazines are examined, and the advertisements extracted and classified in three groups depending on language choice, namely: (a) only Swedish, (b) Swedish and English, and (c) only English.

Regarding the second group, the advertisements where English and Swedish are mixed, Bhatia's classification of moves for print advertising

[1] Due to space limitations, only one appeal has been provided as illustration. The whole model can be found in Pollays' paper (1983).

is used so as to identify the location and function of English within the message. Then, Pollay's list of appeals is employed to discover which values are expressed in English.

For the latter group, *i.e.* those messages written entirely in English, the scope of the company advertised is considered. Does the company operate on a local, Nordic or global scale? Can that provide any clues as to why the whole message is written in English?

3. Results

This section presents the results obtained in the analysis of the sample. First, the distribution of English in the sample is presented. Then, the messages fully written in English are examined. Finally, attention is drawn to the analysis of the texts where English and Swedish are combined.

The first stage of the analysis reveals that the ten magazines examined contain 430 advertisements, out of which only 73 contain English to some extent. That constitutes 17% of the total. From these 73, nine messages are entirely written in English, and 64 mix English and Swedish.

Regarding the nine advertisements written completely in English, further examination has revealed that seven of those campaigns belong to global companies—e.g. Mont Blanc, Henderson Global Investors, Deutsche Bank, etc.—, and have been used in several countries worldwide. This seems to indicate that these campaigns are written in English merely for practical purposes. In other words, because they are written in English, the campaigns can be used in different countries, without having to translate or adapt the copy to the different local audiences. Thus, these companies seem to be employing a global approach to the promotion of their products.

Besides those seven, two more advertisements fully written in English have been found in the sample; these, however, publicise a Nordic and a Swedish organisation respectively. The first one of these advertisements is for a Nordic firm that sells sweets in the different Nordic countries. Even if the scope of this company is not international, given that the targeted audiences speak different languages (i.e. Danish, Finnish, Norwegian and Swedish), the company's strategy is comparable to that of the previous cases. In other words, English is used as a strategy

that allows the implementation of the same campaign in more than one country.

As for the second campaign, the Swedish advertisement belongs to Gotland University (see Figure 1). The reasons why this institution uses only English may be related to two different aspects. On the one hand, advertising in English may attract international students, which is currently important for universities in general, and for this one in particular, as a visit to their website demonstrates. In fact, their institutional website contains some statements that point at internationalisation as an important component in their agenda:

- Gotland is a very dynamic region that is active in its supporting education and collaboration both on the national and international level.
- Do you want a successful career in international management? Attracting students worldwide, the Master in International Management program prepares you for doing business in the internationalized world of today.

On the other hand, the appeals used in their advertisement include *effectiveness* ("our former students work at…", which implies that their alumni have managed to find a job in the areas connected to the studies they received from this university), and independence ("where do *you* want to go?", where the use of a different typography indicates the question is addressed at an individual member of the audience) which, combined with the modern image conveyed by the visual elements, could be used as a strategy to increase the attractiveness of the institution for the audience.

Moving on to the next phase in the analysis, the focus is on the moves and the appeals where English is used in the 64 advertisements that mix both languages, English and Swedish.

Regarding the moves analysis, as mentioned in the method section, Bhatia's model (2004, 2005) is used so as to identify the location of the English phrases found. This, in turn, provides a rationale that may explain the role of English in these advertisements.

The analysis of the sample shows that the move that contains English more often is the headline, with 57 instances. This move is usually the most important element, along with the visual components, in an advertisement when it comes to attracting the reader's attention. Typically, headlines include slogans or catchphrases that are designed to remain in the audience's memory.

Figure 1. Advertisement for Gotland University

The second move in terms of frequency in the presence of English is the signature, with 43 instances. This move provides information about the company, such as its name, contact details, and logo; additionally, the website address and name of the brand are normally present too, sometimes merged with the logo. This move has been found to be particularly interesting in the sample. More specifically, it has been observed that companies often include a phrase or a short sentence in English (see Figure 2), along with an image of the product or the company's logo on the right bottom corner; the position of this move is extremely relevant since, as Kress and van Leeuwen (2006: 183) state,

the elements that are displayed on the right bottom corner are more likely to be identified by the reader as relevant information; thus, these elements are more likely to be remembered.

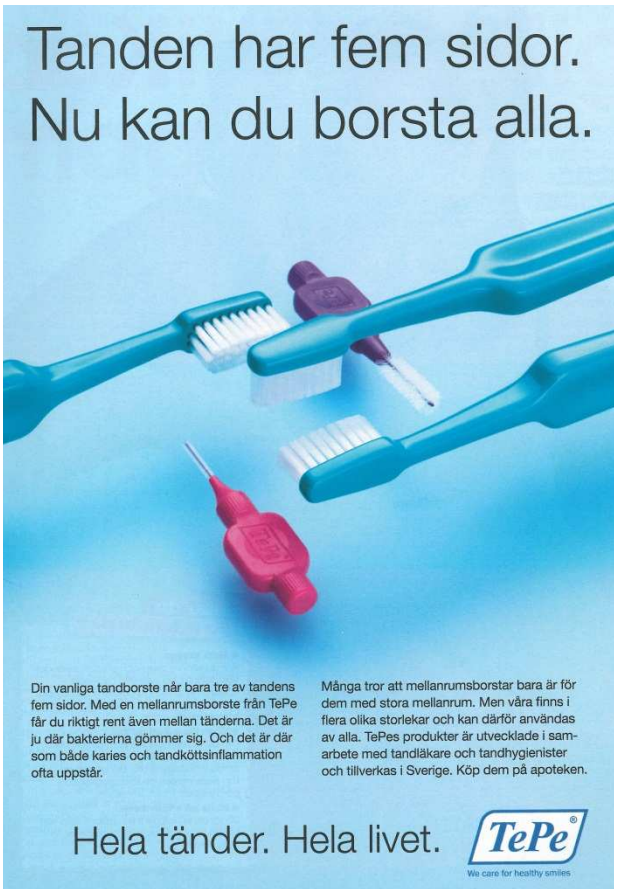

Figure 2. Advertisement for TePe tooth care products

The lead, with 29 instances, has been found to be relatively important as a carrier of English. In fact, this move has been noted to be quite often written entirely in that language (see Figure 3). The function of leads in this type of promotional discourse is to expand the headline; leads sometimes become the slogan. According to Bhatia (2004), the main objective of this move is to justify the product; this is done by

establishing a niche in the market (e.g. pointing at a need the consumers may have) and then attracting the audience's attention towards the product as the way to fill that gap.

Figure 3. Advertisement for Lucullus sauces

The last move where English has been found in the sample is the copy. The copy is the main text of the advertisement, and it contains the details about the product or service. In the sample, 11 texts include English in this move. However, a closer analysis reveals that (a) these copies are not completely written in English, and (b) the presence of English is reduced

to phrases or short sentences, which often refer to the name of the product, or the text on the product's label (see Figure 4).

Figure 4. Advertisement for Burt's bees moisturiser

The third stage of this analysis involves the identification of the advertising appeals expressed in English in the sample. As explained above, the concept of advertising appeal refers to the values that a message attaches to the advertised product. These values are analysed by categorising their actualisations—verbal or non-verbal; explicit or implicit—according to the semantic field they activate. This part of the analysis has revealed that the most recurrent appeals expressed in

English are *effectiveness* (25 instances), *adventure* (17 instances), and *distinctiveness* (12 instances). This means that the most common features that are attributed to the products through English are connected to the three aforementioned semantic fields. Some examples taken from the sample include:

Table 4. Examples of appeals in English from the sample

Appeal	***Example***
Effectiveness	*More taste.*
	Toyota, always a better way.
	Better sound through research.
Adventure	*Twisty ride.*
	Some like it hot.
Distinctiveness	*Sublime bronze.*
	Technology and elegance.

In addition, during the analysis it has been noticed that some of the features observed are sometimes constant among advertisements of similar types of products. For instance, the texts promoting videogames are an interesting case in that many of them seem to follow a common pattern. These advertisements use English in the headline, lead, signature, and in the copy to a certain extent, and they all contain references to *untamed* and *adventure* as appeals; besides, Swedish is used in the copy to provide the details related to the specific dates and retail outlets where the products can be bought. These firms are global brands that seem to use the same campaign globally.

Similarly, in *Motor* magazine, it has been observed that local companies in the motorcycle sector—usually official retailers of international brands—tend to use English in their headlines, leads and/or signatures, in combination with the appeal of *adventure*. However, the details about the product, service or special offer are given in Swedish.

4. Discussion

This section discusses the significance of the results shown in the previous section, and is organised around the three research questions

addressed by this study, namely: (a) how much English is there in Swedish print advertisements? (b) which part(s) of the message are more likely to contain English? and (c) which values are attributed to the products through English words or phrases?

The first question refers to the actual presence of English in Swedish print advertising. An interesting aspect that derives from the results of this study is that, only nine out of the 73 print advertisements analysed are written exclusively in English, which is a relatively low ratio. While the inclusion of publications targeting different population segments may have had an impact on the sample in terms of language choice, the low presence of English is still surprising given the attention that globalisation as a phenomenon has received in the last couple of decades. In this sense, a possible explanation might be connected to the concept of glocalisation. This concept, as defined by Robertson, refers to "the tailoring and advertising of goods and services on a global or near global basis to increasingly differentiated local and particular markets" (Robertson 1995: 28), and is sometimes summarised as "think globally, act locally"[2]. Thus, it seems that most companies tend to go for a glocalised approach to marketing, at least when it comes to advertising their products in magazines; this means that they target different audiences over the world, and sometimes employ certain common elements, such as slogans or catchphrases, but the core of the message is adapted to each specific community. In this context, only a few companies seem to opt for a global approach in which a single campaign written in English is used in different countries. In fact, the sample as a whole contains a limited amount of messages written only in English.

It is also worth mentioning that among those nine advertisements fully written in English there are two campaigns of a rather different nature. One of them is a Nordic company which sells sweets in Denmark, Finland, Norway and Sweden, and which implements the same campaign in the four countries. The second case is that of a Swedish university whose promotional text is English. Considering the on-going internationalisation of students and staff at universities all over the world, it is easy to understand why some universities choose to advertise in English as a tactic to attract new students. An issue that would be

[2] For further information see Robertson (1994, 1995), Svensson (2001), Maynard and Tian (2004).

interesting to explore in connection to this is why, among the four universities whose advertisements are included in the sample, one produced a message written exclusively in Swedish, two mixed Swedish and English, and the third one chose to use only English. Unfortunately, the present study is not able to provide an explanation for this discrepancy, although the reasons could be connected to differences in the student populations the three institutions usually receive, or expect to attract.

The second aspect explored in this paper refers to the location of English within the advertisements. This has been studied through the tools offered by genre studies. In particular, Bhatia's schematic structure of print advertisements has been used to survey which moves are more commonly selected as carriers of English elements. These, as mentioned above, have been found to be mainly the headline, the signature, and the lead, while Swedish is resorted to for the copy, where the main information about the product or service is offered. Only some cases have been found where English is present in the copy. In these cases, however, English is mostly used to quote either the name of the product, or the text on its label. Therefore, English may be used in the advertisement as a way to help the consumers identify the product when they see it in the retail outlet.

All in all, the results of the moves analysis seem to indicate that English is used in those moves that, following Bhatia (2005: 213-225), typically seek to catch the readers' attention, and will remain in their memory as catchphrases and slogans, while the main informative load—details about the terms and conditions, the qualities and benefits of the products, etc.—is conveyed in the local language, perhaps to ensure the audience's full understanding. This tendency might be connected to the aforementioned concept of glocalisation. In other words, companies may be using a strategy that consists of keeping the attention-grabbing moves in English, while adapting the copy for each local audience. In that sense, it would be interesting to explore why English is resorted to as a way to catch the audience's attention; a plausible reason may be that companies use English because, surrounded by Swedish, it stands out from the main text—because it is *different*— and will be remembered more easily.

A different explanation, however, may be connected to the third aspect analysed in this paper, namely, the advertising appeals realised by means of English elements. In this sense, the most frequent in the sample

are *effectiveness*, *adventure* and *distinctiveness*. The recurrence of these appeals could indicate some common association in Swedish advertisements between English and these qualities. In other words, it might be that Swedish advertising professionals see English as a particularly successful strategy to activate the three aforementioned values in the mind of their audience, and to attribute those values to the products they are publicising. These ideas are not new, however; previous studies have pointed in this direction (e.g. Larson 1990; Piller 2003; Pahta and Taavitsainen 2004; Cheshire and Moser 2010), and have claimed that English is often used to make certain products or services more attractive for the reader by associating them with certain values, such as modernity or distinctiveness.

An interesting issue that has been revealed by the analysis is the fact that in some industries there seem to be common practices regarding the use of English in commercial texts. In particular, a significant number of advertisements for videogames analysed in this study display a similar strategy; companies seem to create a global campaign in which the attention-grabbing elements are written in English, and then the local language is used to provide the information which probably varies from country to country, e.g. which retail outlets sell the videogame, or when the product will be launched (see Figure 5). Nevertheless, more empirical data that illustrates what is done in other countries—and maybe even interviews with advertising agencies—would confirm whether this is a common strategy used in this specific sector.

Figure 5. Advertisements for videogames Syndicate and Kingdoms of Amalur: Reckoning

5. Conclusions

The present study has explored the presence and uses of English in Swedish print advertising. The main motivation for this research has been the fact that little attention seems to have been paid in the past to the incidence of English in Swedish advertisements for goods and services, despite the apparent ubiquity of English in the Nordic countries. In particular, the focus has been on the frequency of English words in phrases in a sample of Swedish print advertisements, the moves in which English is used, and the appeals it brings into the message.

Regarding the ratio of English and Swedish in the sample, English has a relatively low frequency, and it is mostly employed in combination with Swedish; campaigns written exclusively in English are quite rare in the texts analysed. As mentioned above, the sample included publications targeting different population segments, which may have had an effect on the results in terms of the presence of English. Nevertheless, this has been a rather unexpected outcome, especially in

light of previous studies which suggested that Nordic citizens are heavily exposed to English in the media. These findings may indicate that, when it comes to print advertising, companies tend to prefer glocalisation strategies by which certain parts of their campaigns are reused—e.g. the headlines or the slogans—, while the rest of the text is adapted so as to consider the idiosyncrasy of each specific audience. It would be interesting, nevertheless, to see whether research on advertising in other media yields different results.

As far as the location of English and its role in the message, more often than not English is used in the sample to give linguistic expression to the moves that seek to attract the reader's attention, namely the headline, the lead and the signature. On the other hand, the copy is usually written in the local language, except for some instances where English is used to refer to the product's name or the text on its label. A plausible explanation for this practice may be that English stands out from the rest of the message as being different and it may, therefore, make slogans or catchphrases easier to remember. However, the details about the product or service are usually conveyed in Swedish; this may be a strategy companies resort to when they want to make sure this information is easily understood by the local audience. In fact, previous studies (e.g. Gerritsen et al. 2000) claim that, in some cases, local audiences may not fully comprehend the message when this is written in English.

As for the specific appeals English is more likely to represent, the findings seem to support the results of previous studies which indicate that English may be used to make products or services more desirable in the eyes of the prospective consumers. In fact, the data suggests that the appeals more commonly evoked by English are *effectiveness*, *adventure*, and *distinctiveness*, which are used in a positive manner.

These conclusions may help advertising professionals and students, as well as researchers and instructors working in the field of languages for specific and professional purposes. However, the present study was designed as an initial attempt to survey the current situation of print advertising in Sweden, and should therefore be regarded as a first approach to the issue. The findings are, thus, not comprehensive enough to fully explain some related aspects, such as why some advertisers choose to mix English and Swedish, while others prefer to promote their products only in one of those two languages. Further research could

make use of interviews with advertising professionals to try to answer this question. Another issue that remains unexplained is whether advertising professionals and audiences are fully aware of the associations these messages seem to reflect. Finally, it will also be interesting to see how the advertising landscape evolves in the future. As Larson (1990: 368) already indicates, nowadays it is the younger audiences who are perceived as more receptive to the English language, but as time goes by, its presence in slogans and phrases may gradually become commonplace for wider segments of the population.

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Students' attitudes to lecturers' English in English-medium higher education in Denmark

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Abstract

This study examines the evaluative reactions of university students to their non-native lecturers' English skills in English-medium instruction, i.e. when English is used as a lingua franca in an academic context. In particular, we examine the relationship between perceptions of English language proficiency and perceptions of general lecturing competence (defined here as knowledge of subject and teaching skills). Statistical analyses of 1,700 student responses to 31 non-native English-speaking lecturers at a major business school in Denmark revealed that the students' perceptions of the lecturers' English language proficiency is a significant predictor of their perceptions of the lecturers' general lecturing competence and vice versa. We interpret this as a two-way relationship caused by speech stereotypes similar to those which have been demonstrated in social-psychological experiments. This effect should be addressed when universities use student ratings to evaluate teaching in English-medium content courses.

1. Introduction

English is used increasingly as the medium of instruction at universities and business schools around Europe (Van der Wende 1996; Wächter & Maiworm 2008: 10). In Denmark, many institutions of higher education are offering a steadily growing number of English-medium courses, especially at postgraduate level in the natural sciences and business programmes, as evidenced by the curricula at the Danish Technical University, the Faculty of Life Sciences at the University of Copenhagen, and at the Copenhagen Business School (CBS). Many so-called "prestige programmes", such as the *Copenhagen Masters of Excellence* programmes at the University of Copenhagen, are conducted entirely in English, partly in order to be able to attract the very best international students and partly to prepare graduates for a globalised job market (see e.g. Coleman 2006: 7ff; Wächter & Maiworm 2008: 67). At CBS there is a surging demand from students for English-medium programmes, and a proportionate decrease in interest in Danish-language programmes, even

Jensen, Christian et al. 2013. "Students' attitudes to lecturers' English in English-medium higher education in Denmark." *Nordic Journal of English Studies* 12(1): 87-112.

among Danish students (Sven Bislev, vice dean of education at CBS, personal communication).

This shift towards English-medium instruction at universities has been attracting attention because of its political and educational perspectives. The political interest mostly revolves around the fear of "domain loss", the risk that Danish can no longer be used to communicate scientific knowledge (Haberland et al. 1991; Jarvad 2001; *Danish Ministry of Culture* 2008; Gregersen et al. in press). With regard to the educational perspective, on the other hand, the major concern seems to be what might be termed "content loss", i.e. that learning is impaired.

To this can be added the related issues of attitude and image, which have not received much attention in the literature on English as an academic lingua franca. Interviews with directors of study and deans of education reveal that there is no shortage of anecdotes about the poor English skills of some teachers (and students). Recent studies report similar comments or responses from students in surveys conducted in Sweden (Bolton & Kuteeva 2012), Austria (Tatzl 2011) and Norway and Germany (Hellekjær 2010). There is thus good reason to attempt to shed further light on this issue through more systematic and controlled investigations of students' evaluational reactions to their teachers' English skills and of the potential effects this may have on the image of both individual lecturers and the institution as a whole.

The issues of content loss and image, or what Lavelle (2008) refers to as "credibility", are clearly interdependent. He notes that "age, gender, appearance and nationality each can affect student perceptions of teacher credibility, and so too can language proficiency when English is the instructional lingua franca", and he comments that "it is difficult, perhaps impossible, to know definitively how students assess credibility" (Lavelle 2008: 143). According to Lavelle, repeated errors, such as consistently mispronouncing terms or expressions for key concepts in a lecture, or stigmatised L1 features can "erode teacher credibility" and lead to students paying more attention to linguistic errors than to the message of the lecture (Lavelle 2008: 144). This, of course, must be expected to lead to content loss and reduced learning.

This notion of credibility, or image, is consistent with a general finding in the literature on the social psychology of language. Social psychological experiments have demonstrated that listeners may judge

speakers negatively both on indicators of social attractiveness and on indicators of competence, based merely on variation in accent—not only with respect to regional accent (e.g. Giles 1970), but also to native vs. non-native accents (Coupland & Bishop 2007; McKenzie 2008). Such evaluations are based, at least to some extent, on stereotyping, i.e. on "over generalizations that are applied to any ethnic group member regardless of his or her individual characteristics" (Grant & Holmes 1981: 107). In the area of linguistic stereotyping, it was shown as early as the 1960s that listeners make judgements about speakers' social attractiveness and competence from hearing even fairly short samples of speech in experimental settings, and that these judgements reflect general attitudes towards the group of which the speaker is judged to be a member (Lambert et al. 1960; Lambert 1967). The same social psychological mechanisms can be expected to have an influence on how teachers are perceived in the classroom. In other words, it is possible that variation in teachers' linguistic abilities may invoke stereotyped impressions of their overall competences and thereby have an impact on whether students perceive them to be competent, not only linguistically but also academically and/or pedagogically.

Universities in Denmark are beginning to address the issue of the lecturers' English skills in different ways. One of these is to simply ask the students whether the teachers' English is adequate for the purpose—typically as part of the course evaluation. This inevitably raises the question of whether we can actually trust students' assessments of their lecturers' English. Do their ratings accurately reflect the lecturers' English skills in that specific context, namely teaching graduate and undergraduate courses in higher education? Our expectation is that they do not. Some studies have shown that judgements about language can be influenced by the listeners' knowledge (whether false or accurate) about the speaker's "status", in terms of the speakers' accomplishments in a number of different tasks and educational or vocational background (Thakerar and Giles 1981; Ball et al. 1982; Rubin 1992). And Orth (1982) found a very low correlation between student ratings and the ratings of a group of 12 experienced EFL teachers of the speaking proficiency of 10 foreign teaching assistants. However, student evaluations, including evaluations of their lecturers' English language skills, are currently used as a measure of success (or failure) of courses

and lecturers at universities. It is therefore important to learn more about the accuracy and potential biases of these evaluations.

At least one study, Rubin & Smith (1990), has demonstrated that when students perceive lecturers' speech to be highly accented, they also judge them to be poor teachers. This study was concerned with International Teaching Assistants at North American universities—a subject which has received a lot of attention, not least in the 1980s and 1990s (Orth 1982; Brown 1988; Gill 1994; Rubin 1992; Plakans 1997). In most of these studies the listeners (students) are either predominantly or exclusively native speakers of (North American) English. It therefore still has to be determined to what extent their findings are valid for the English as a lingua franca (ELF) context which we find in European universities offering English-medium content courses.

Based on the above discussion we have formulated two hypotheses which are in fact mirror images of each other:

1) Students' perceptions of their lecturers' English language skills influence their perceptions of the lecturers' *general lecturing competence* (knowledge of their field and teaching skills);
2) Students' perceptions of their lecturers' general lecturing competence influence their perceptions of the lecturers' *English language proficiency*.

We suggest that the relationship between perceptions of English language proficiency and perceptions of general lecturing competence is one of mutual influence. The issue of directionality cannot be determined by the statistical tests, however, but is treated in some detail in the discussion.

In addition to the main hypotheses, we explore the extent to which the hypothesised relationships between the two variables are influenced by a range of background variables which are linked to either the "object" (the lecturers) or the "subjects" (the students):

- Student variables: gender, year of study, academic results, self-assessed English skills, L1
- Lecturer variables: gender, age, L1, teaching experience, job category

2. Method

Evaluative reactions to language, most typically accent, are traditionally examined using the matched-guise technique (Lambert et al. 1960; Lambert 1967) or a variant of this design, which allows for direct control of the background variables. However, we wanted to see if such attitudinal effects, specifically the ones listed as hypotheses 1 and 2 above, could be detected in a more ecologically valid, and consequently less controlled, design that is by and large identical with the method we normally use to collect student evaluations of courses. The aim was to show that the use of appropriate statistical techniques allows us to test our hypotheses even under these less controlled conditions, thus paving the way for developing and applying a valid procedure for future research of this type.

A combination of questionnaires and audio recordings, all collected at CBS, was therefore used to answer the issues outlined above. Audio recordings were made of 31 45-minute lectures, in which the teacher gave a 20-30 minute presentation, usually followed by a brief discussion or questions from the students. At the end of each lecture, separate questionnaires were distributed to students and teachers, who filled them in on the spot.

The student questionnaire contained 38 items on attitudes to the lecture, the teacher, and the teacher's command of English. The first three items served to gauge the students' global and immediate responses to each of these three aspects: they were asked to rate, on a scale from 1 to 5, (1) *this lecture*, (2) *the teacher* and (3) *the teacher's English*. Of the remaining 35 items, six were excluded from further analysis (four because they covered "interaction", of which there turned out to be little, and two for technical reasons). The final 29 items were phrased as statements to which the students were required to respond on a four-point Likert scale ranging from "strongly agree" to "strongly disagree" (with an additional option of "don't know"). The responses were subjected to Rasch analysis (Rasch 1960), which confirmed that a single scale could be constructed for each section. These scales and the statements on which they are based are shown in Figure 1.

Rasch scale label	Items
Lecture Content. Statements about the level, usefulness and general appeal of the lecture/topic	I found the academic level appropriate I found the content of this lecture difficult I found the lecture useful in advancing my knowledge I learned a lot from this lecture I found that this lecture improved my knowledge of the area I found the lecture interesting
Lecture Structure. Statements about the structure and general presentation of the lecture	I found the lecture well-structured I found the lecture well-presented I found the lecture well-organised I found the lecture easy to follow
General Lecturing Competence. Statements about the lecturer's knowledge of the field and ability to communicate in an effective and engaging manner.*	I found the teacher very knowledgeable about the subject I found the teacher to be a real expert in this field I found that the teacher was good at explaining the subject I found the teacher engaging I found that the teacher kept my interest I found the teacher enthusiastic about the subject I found the teacher pleasant
English Language Proficiency. Statements about various aspects of the lecturer's English, such as grammar, fluency, vocabulary and pronunciation.	I found the teacher's English fluent I found the teacher's English easy to understand I found that the teacher often struggled to find the appropriate words I found that the teacher was good at re-phrasing the meaning of key concepts and terms I found that the teacher had adequate vocabulary to describe the subject matter well I found that the teacher had too many long hesitations I found that the teacher had good English grammar I found that the teacher made basic grammatical errors I found that there were too many unfinished sentences I found that the teacher has good English pronunciation I found that the teacher sounds like a native speaker of English I like the teacher's accent

Figure 1. Rasch scale labels and questionnaire items
* Originally two separate sections, but they were combined into one Rasch scale.

Most of the statements express positive attitudes, with negative statements only in the scales English Language Proficiency and (in one case) Lecture Content. In hindsight it would have been better to have positive and negative statements distributed more evenly across the four scales.

We stress that the scale English Language Proficiency was not designed to measure the lecturers' communicative competence, in terms of "getting the message across" and interacting effectively with students while lecturing in an ELF context. Both the anecdotal evidence of students' complaints about their lecturers' English (including student evaluations) and comments in surveys on English-medium instruction (Klaassen 2003; Bolton & Kuteeva 2012) suggest that issues of language proficiency can trigger negative attitudes towards the lecturers. The scale was therefore intended to be a measure of the students' perceptions of the lecturers' proficiency in English.

The attitude statements were followed by a section with questions on the students' biodata, including age, gender, academic results in upper secondary school, nationality, native language, previous exposure to English, and self-assessment of English skills (both general proficiency and proficiency in connection with specific academic activities).

The teacher questionnaire contained questions on the teachers' own presentations and their perceptions of the students' motivation and interest in the specific class. They were also asked to provide information about their preparation for giving the lecture in English, e.g. checking terminology, pronunciation and grammar. In addition, questions were included on whether they thought they would have been able to perform better (on a number of parameters) in their native language. Finally, they were asked to provide the following background data: job category, age, gender, nationality, native language(s), experience using English in English-speaking countries, teaching experience and self-assessment of English skills. Only the background data from the teacher questionnaire are included in the analyses in this paper; details of the teachers' self-assessment can be found in Jensen et al. (2011).

The sample was drawn from 12 English-medium degree programmes at CBS—six BA/BSc programmes and six MA/MSc programmes within the fields of economics, politics, management and business administration. In total, 31 lectures were included in the study, 21 of which were at undergraduate level and 10 were at postgraduate level.

The 31 lecturers comprised seven women and 24 men. In terms of nationality, 24 were Danes and seven were non-Danes.

Altogether, 1,707 student questionnaires were collected, but the actual number of individual respondents is smaller than this, since some students attended two sessions. All student responses were anonymous, and the response rate was close to one hundred per cent. This high rate was achieved because we opted for handing out the questionnaires in class rather than using online questionnaires. The number of responses per session varied between 20 and 183, with a mean of 55. Approximately 60% of the respondents were Danes, whilst the remaining students came from a variety of other nationalities.

The spoken English proficiency of the non-native speaking (NNS) lecturers was assessed by three experienced EFL examiners, referred to below as the "EFL examiners". All three examiners were trained EFL teachers with extensive experience of assessing English in an ELF context, as teachers and testers of diplomats at the School of Languages at the Ministry of Foreign Affairs and as examiners in the CBS Project in Language Assessment for Teaching in English (PLATE, Kling & Hjulmand 2008). They were given access to the audio recordings of the lectures, but no other information about the lecturers was revealed to them. All three examiners assessed all 31 lecturers; after they had given their initial ratings independently of each other, they met and discussed their assessments before arriving at one joint (or "communal") rating for each lecturer. The examiners were asked to relate their assessment to the Common European Framework of Reference global scale (CEFR: 24) with the added instruction that they should indicate whether a performance was, for instance, a "high C1" (C1+), a "low C2" (C2-), etc. These ratings were then coded numerically for subsequent statistical analysis. The lowest rating was a B1+ and the highest a C2-, corresponding to the values 9 and 16, respectively, on the numerical scale.

3. Results

3.1 Effect of perceived English skills on perceived general lecturing competence and vice versa

The effect of perceived English skills on perceived general lecturing competence cannot be tested directly with our data, since we did not control for variation in *actual* competence (as determined by some external measuring instrument). Obtaining such a measure would be difficult, partly because our variable General Lecturing Competence also includes statements on the lecturer's "knowledge about the subject". However, by examining the effect that certain control variables, or independent variables, have on the two dependent measures (the students' ratings of the lecturer's English and general lecturing competence, respectively), it is possible to gain indirect evidence of the connection between those variables. We constructed two mixed effects regression models, one with the students' ratings of the lecturers' general lecturing competence as the dependent variable and one with the students' ratings of the lecturers' English language proficiency as the dependent variable. Mixed effects models allow for the control of random variation between the levels of certain sampled variables—in our case the lecturer and the students' nationality—through the inclusion of random effects. This means that we can assess the effects of our variables of interest over and above such variation between the sampled variables (Baayen 2008: 241ff). Both models were fitted using the *lme4* package in the statistical computing environment R. We applied a forwards stepwise approach to fitting the models, building the models by adding one variable at a time—starting with the most control-oriented variables and finishing with the most interesting variables in terms of the tested hypotheses. At each step in this process the contribution of the included variables was evaluated. Variables which contributed significantly to the model were kept while those which were non-significant were excluded.

3.1.1 Predicting perceived general lecturing competence

The following variables were tested in the order in which they are presented below:

- Random effects: lecturer, students' nationality
- Lecturer background variables: amount of teaching experience in mother tongue (L1), amount of teaching experience in English, gender, job category, age
- Student background variables: gender, year of study[1], (self-reported) academic results before enrolling at CBS, self-assessed competence in English, language background (L1)
- Students' responses on other Rasch scales: Lecture Content, Lecture Structure, and finally English Language Proficiency

Most of the above-mentioned student variables have in previous studies been found to have a significant effect on evaluations of lecturers' competence. Ling and Braine (2007) found an effect of year of study on undergraduate students' attitudes to NNS English teachers in Hong Kong, and Plakans (1997) found an effect of both gender and "year of enrolment" on students' attitudes towards International Teaching Assistants (ITAs). McKenzie (2008) found an effect of both gender and self-assessed proficiency in English on perceptions of speaker "competence" in a verbal-guise experiment, such that the female Japanese informants rated the speakers more positively than did the male informants, and informants who assessed their own English higher gave more favourable ratings to (some of) the speakers in the experiment. Finally, Carrier et al. (1990, cited in Plakans 1997) found that NNS undergraduates gave higher ratings to ITAs than did native English-speaking students. However, the findings obtained in earlier investigations were not confirmed in the present study, where none of these variables were found to have any effect on the perception of general lecturing competence.

With regard to the lecturer variables, there was a significant effect of gender before job category was included. It should be pointed out that only seven of the 33 lecturers are women, including the only two PhD

[1] This variable refers to the placement of the course in the curriculum, but since virtually all students follow the curriculum as scheduled, it has been included as a student variable.

students in the survey. These two female PhD students both received fairly low ratings, which may be an effect of both the gender and job category variables or some combination of the two. However, in our data, the variance was explained better by the job category variable. Adding the job category variable also meant that the effect of the variable teaching experience in English was no longer significant.

The final model revealed significant effects of four explanatory variables, namely the factor job category and the co-variates Lecture Content, Lecture Structure, and English Language Proficiency. In addition to these four explanatory variables, random intercepts were included for the variables nationality and lecturer, and random slopes were included for the variables Lecture Content and English Language Proficiency. The residuals were inspected for the initial model, outliers were removed from the data set using a cut-off point of 2 standard deviations (6.6% of the responses), after which the model was refitted. The final model explains 75% of the variance in the trimmed data set.

Table 1. Summary of the mixed-effects analysis of variables predicting General Lecturing Competence. The model also includes random intercepts for lecturer (SD estimated at 0.4125) and students' nationality (SD 0.0638), and by-lecturer random slopes for Lecture Content (SD 0.1447) and English Language Proficiency (SD 0.0830).

	Estimate	*MCMC mean*	*HPD95 lower*	*HPD95 upper*	*pMCMC*
(Intercept)	1.2544	1.2433	0.9458	1.5213	0.0001
Job cat. (assoc. prof.)	-0.1895	-0.1930	-0.5242	0.1488	0.2618
Job cat. (ass. prof.)	-0.7964	-0.7728	-1.1685	-0.3819	0.0006
Job cat. (PhD stud.)	-1.8241	-1.8002	-2.3633	-1.2601	0.0001
Job cat. (part-time l.)	-0.2483	-0.2563	-0.6217	0.1462	0.1896
Lecture Content	0.2247	0.2280	0.1702	0.2826	0.0001
Lecture Structure	0.3474	0.3499	0.3116	0.3910	0.0001
English Language Proficiency	0.1215	0.1229	0.0878	0.1593	0.0001

The estimated coefficients and related values for the fixed effects in the final regression model are presented in Table 1, with an indication of significance level as determined by Markov chain Monte Carlo (MCMC) sampling (see Baayen et al. 2008). The second column shows the mean estimate for 10,000 MCMC samples, while the third and fourth columns show the credible intervals within which 95% of these MCMC estimates lie (corresponding to 95% confidence intervals). For the co-variates, if the number in the *Estimate* column is positive, it means that a higher score on this variable is associated with a higher score on the dependent

variable, here General Lecturing Competence. A negative *estimate* indicates that a higher score on this variable is associated with a lower score on the dependent variable. For the factor job category, each estimate indicates the difference in ranking between a reference level, in this case full professor, and the level of the factor specified in the relevant line.

It appears from Table 1 that there was a significant effect of job category on General Lecturing Competence. This factor has five levels, four of which can be ranked. The reference level here is "full professor" (not shown in the output), and there was an increasing negative effect of job category with each level lower in the hierarchy: associate professor, assistant professor, PhD student. The difference between full professors and associate professors was not significant, but assistant professors and PhD students were rated significantly less favourably than full professors. Part-time lecturers fall outside this hierarchy, since they are generally recruited both among recent graduates and among high-level executives from the business community; this is reflected in the fact that the difference between full professors and part-time lecturers is non-significant.

The measures Lecture Content and Lecture Structure were also both significant predictors. In other words, lecturers whose lectures were evaluated more positively in terms of content and structure also received more positive evaluations in terms of their general lecturing competence.

However, the result that we are most interested in here is the last row, which shows that there was a significant effect of English Language Proficiency on General Lecturing Competence. The effect was positive, as expected, which means that lecturers whose English was perceived as better were also perceived as having higher general lecturing competence, even after the other explanatory variables had been taken into account.

3.1.2 Predicting evaluations of lecturers' English

Having established that students' perceptions of the lecturers' English have predictive value for their perception of the lecturers' general lecturing competence, we turn to the analysis of which individual factors have an effect on the students' ratings of the lecturers' English. Most of the variables which were entered into this model are the same as for the

previous model, but a few additional factors were tested. Most importantly, we included the ratings from the EFL examiners as an expression of the lecturers' actual, rather than perceived, proficiency in spoken English. Obviously, the EFL examiners' ratings are also subjective, but we believe that the communal ratings of a panel of highly experienced EFL teachers and examiners provide the best possible approximation to an "objective" measure of actual proficiency. To the extent that this assumption is valid, the remaining variables in the model can be expected to capture the variance in the students' ratings which is not directly related to language skills.

The following variables were tested in the model, again in the order in which they are presented below:

- Random effects: lecturer, students' nationality
- EFL examiner ratings
- Lecturer background variables: gender, age, amount of teaching experience in their L1, amount of teaching experience in English, job category, length of stay in an English-speaking country
- Student background variables: gender, year of study, academic results before enrolling at CBS (self-reported), exposure to English, self-assessed competence in English
- Assessment scale variables: Lecture Content, Lecture Structure, General Lecturing Competence
- Whether the lecturer and the student share the same L1 (Lecturer/Student Shared L1)

There was a significant effect of age before job category was introduced into the model. The contribution of job category as well as that of Lecture Content became non-significant once General Lecturing Competence was included. It should be noted that there is a fairly complex relationship between teaching experience in L1, teaching experience in English and the amount of time spent in an English-speaking country, which will not be examined further in this paper.

The model was trimmed in the same way as the model above, but using a cut-off of 2.5 standard deviations (removing 1.8% of the data points). The estimates and associated values of the fixed effects that turned out to be significant in the final model are presented in Table 2.

Table 2. Summary of the mixed-effects analysis of variables predicting lecturers' English competence. The model also includes random intercepts for lecturer (SD estimated at 0.5136) and students' nationality (SD 0.2051).

	Estimate	*MCMC mean*	*HPD95 lower*	*HPD95 upper*	*pMCMC*
(Intercept)	-2.7439	-2.7465	-3.9043	-1.4661	0.0002
EFL examiner ratings	0.2568	0.2557	0.1526	0.3520	0.0001
Stay Abroad (log)	0.1592	0.1587	0.0418	0.2780	0.0078
Lecture Structure	0.2601	0.2601	0.1736	0.3537	0.0001
Lecturer/Student Shared L1	-0.3737	-0.3895	-0.5720	-0.1998	0.0001
General Lecturing Competence	0.4423	0.4442	0.3752	0.5107	0.0001

Table 2 shows that the EFL examiner ratings were found to be a significant predictor of the students' ratings of the lecturers' English: lecturers who received a higher rating by the EFL examiners were also evaluated more positively by the students. In addition, there was a significant positive effect of Stay Abroad (log) (the log-transformed number of months a lecturer had spent abroad, using English as the working language). This is perhaps surprising in one respect—if a prolonged stay in an English-speaking country results in improved proficiency in English, then this improvement should have been captured and explained in the model by the EFL examiner ratings. One explanation may be that such an improvement includes areas which are not covered well by the CEFR scale or which require visual contact, for example greater confidence as reflected in body language or facial expressions, or the use of visual aids such as slides (recall that the examiners only had access to audio recordings of the lectures). The students' perceptions of the *Structure* of the lecture were also found to be a predictor of ratings of English proficiency, so the lecturers' English was evaluated more positively in lectures which received higher scores in terms of their structure.

A significant effect was found for the variable Lecturer/Student Shared L1, which is a two-level (yes/no) factor indicating whether the lecturer and the student have the same L1. In most cases where this is the case, both have Danish as their L1. The effect was negative (estimate = -0.3737), which shows that students who shared a lecturer's L1 rated his or her English lower than when this was not the case. Given that Danish is the shared L1 in almost all such cases, the result essentially shows that Danish students gave lower ratings to Danish lecturers.

Finally, and importantly, the analysis also showed a positive effect of General Lecturing Competence, the measure which was used as the dependent variable in the first model. In other words, there is an effect in both directions between the variables English Language Proficiency and General Lecturing Competence. Lecturers who are evaluated positively on one of these variables are also evaluated positively on the other variable. The possible interpretations of these findings are discussed below.

4. Discussion

The mixed-effects analyses reveal an effect of perceived English skills on perceived general lecturing competence and vice versa. However, owing to the design of our study, this is essentially a correlational analysis which cannot explain the causality of these effects. There seem to be at least two plausible explanations. The first possibility could be that the two underlying skills are indeed correlated, in the sense that there is a tendency for lecturers with better skills in spoken English to also have higher general lecturing competence, and that the student ratings simply reflect this. The second possibility is that all or part of the effect may be caused by attitudes, or stereotyping. This attitudinal effect could be monodirectional, in the sense that either perceptions of language skills affect perceptions of general lecturing competence or perceptions of general lecturing competence affect perceptions of English skills, or it could be bidirectional so that there is a reciprocal influence between the two types of competence. In the following each of these possibilities will be discussed.

The first of these possible explanations, that lecturers with better English skills generally have higher general lecturing competence, can be examined, albeit indirectly and in part, by comparing the relationship between the students' perceptions of the lecturers' general lecturing competence and a) their perceptions of the lecturers' English skills and b) the EFL examiners' ratings of the lecturers' English skills. The students' ratings of English skills and general lecturing competence are very highly correlated ($rho = 0.791$, $p < 0.001$). If the students' ratings reflect a genuine tendency for correlated skill level, then we would expect to find a similar correlation if we replace the students' ratings of English skills by those of the EFL examiners. However, a Spearman's

rank order correlation analysis between the examiner ratings and the mean values of the students' ratings of general lecturing competence reveals only a low to moderate, though just significant, correlation (*rho* = 0.363, $p = 0.045$). The difference between the students and the EFL examiners strongly suggests that the effect cannot merely be a reflection of a genuine relationship between lecturing skills and English language skills. Rather, it is likely that the low, albeit significant, correlation between the EFL examiners' ratings of English skills and the students' ratings of general lecturing competence is caused by the impression that the students' perceptions of the lecturers' English skills has left on their perceptions of general lecturing competence. Unfortunately, as stated earlier, we do not have an assessment of the lecturers' *actual* lecturing competence with which the EFL examiners' ratings of English skills can be compared, and it is not obvious how such an assessment could be obtained.

On the basis of the above, we find it reasonable to reject the first of the suggested explanations, that the effects that emerged from the statistical analyses reflect a correlation of actual skill level within the two areas, and turn to the second possibility, that the results are caused by stereotypical attitudes. Here the main problem is to establish the direction of the effect. By nature of the experimental design used in this study, it is not possible to draw any conclusions based on direct evidence. However, it seems reasonable to expect the effect to be bidirectional. The effect of accent variation on perceptions of competence and social attractiveness is well-documented in controlled (often matched-guise) experiments (Giles 1970; Rubin 1992; McKenzie 2008) and has also been documented in a previous study on university students' evaluations of the speech of foreign teaching assistants (Orth 1982). Gill (1994) also found that standard accented (American) students gave more favourable ratings to standard accented teachers than to non-standard accented teachers (British and Malaysian). The reverse effect seems to have attracted much less attention, but Thakerar and Giles (1981) found that evaluations of British English speakers in a matched-guise experiment varied with the information they provided about the speakers (after the informants had listened to the recording). For example, pronunciation was deemed to be more "standard" when informants were provided with "high status" information about the speaker and less standard when they were given "low status" information

about the speaker (compared with a control group). In a related study, Rubin (1992) found that expectations of speaker nationality can affect not only evaluations of the speaker's language but also listener comprehensibility. This effect of perception of group identity on evaluations of language is sometimes referred to as reverse linguistic stereotyping (Kang & Rubin 2009). It is perhaps not surprising then that the relationship between these factors seems to be two-way rather than one-way. If it is based on stereotyping, as we assume it is, then it seems natural that speakers who have been assessed, rightly or wrongly, as particularly competent, based on other evidence, should be perceived as having better English language proficiency.

As we stated in the Introduction, most previous research on students' attitudes to their lecturers' English has focused on the North American situation as a response to native speaker students' complaint about their International Teaching Assistants. But the central findings of those studies would appear also to be valid for the English as a lingua franca situation that we find in European universities, including the one examined in this study. Students' attitudes towards their lecturers' general lecturing competence are affected by their perceptions of the lecturers' proficiency in English. In the light of recent research on ELF, a different result might have been expected. Some findings on ELF are summarised by Jenkins in a recent article entitled "Accommodating (to) ELF in the international university", contrasting ELF with English as a Foreign Language (EFL). Jenkins states that "ELF takes a *difference* perspective as contrasted with the *deficit* perspective of EFL" and writes that ELF speakers "innovate in English […] code-switch […] make skilled use of the accommodation strategy of convergence [..] [a]nd in all of this, they prioritise communicative effectiveness over narrow predetermined notions of 'correctness'" (Jenkins 2011: 928). Furthermore, a study of 22 undergraduate physics students by Airey (2009) reports that, when asked directly, students say that "there were very few differences between being taught in English or in Swedish—they believed that language played an unimportant role in their learning"; the students "suggest that the limiting factor for their learning is the lecturer's ability to mediate physics knowledge in the chosen language" (Airey 2009: 108, 78). (The students' actual behaviour did not fully support their claims, though, and varied with the language of instruction.) Finally, Björkman (2010) highlights the importance of

frequent use of pragmatic strategies in ELF communication and refers to a finding in Hellekjær (2010) that the "lectures that were rated higher and reported as 'most comprehensible' were those which had made use of a number of interactive features, e.g. questions" (Björkman 2010: 86). She adds that "high proficiency does not ensure communicative effectiveness" (Björkman 2010: 87).

The above statements about ELF in higher education all point to communicative effectiveness as the primary consideration in ELF interactions in higher education, downplaying the importance of good language proficiency in the traditional sense of correctness according to standard native norms. Yet, our study shows that—even after the other explanatory factors, such as the lecturer's teaching experience, age, gender and the students' perceptions of lecture content and structure have been taken into account—students still seem to be influenced by their perceptions of language proficiency as regards the use of grammar, vocabulary and pronunciation. And this is in fact in line with another finding in Hellekjær (2010) than the one mentioned above, namely that "[t]he perhaps most important source of lecture comprehension difficulties found in the present study was due to unclear pronunciation" (Hellekjær 2010: 24).

In this study, we have been concerned only with students' *perceptions* of their lecturers' competences; we have not examined whether the lecturers were in fact effective communicators and lecturers, so this remains to be investigated. Two scenarios seem to present themselves depending on the outcome of such an investigation: either English language proficiency turns out to be highly correlated with communicative effectiveness, which would justify the connection that has been established here between perceived language skills and perceived general lecturing competence. Or language proficiency turns out not to be correlated with communicative effectiveness, which would indicate that students' explicit evaluations of their lecturers' English do not provide useful information about the lecturers' ability to teach in English. In ordinary course evaluation forms, questions about the lecturer's English are usually quite similar to one of the first items in our questionnaire, namely "on a scale from 1 to 5 […], how would you rate the teacher's English?", which in our study correlates extremely highly with our measure English Language Proficiency (r = 0.98, Pearson's product-moment correlation). If perceptions of language proficiency turn

out to be poor approximations of actual communicative effectiveness while lecturing, new methods of evaluating lecturers' English will have to be developed and implemented.

To what extent can we expect these results to generalise to other institutions in other countries? At least two issues need to be addressed to answer this question: the role of the setting itself (graduate programmes at a business school in Denmark) and the composition of the sample with regard to cultural and linguistic background. The first of these issues would have to be examined empirically by repeating the study at universities in other countries. The second would require a few changes to the design of the study, so that variables relating to cultural and linguistic background are collected in a more controlled and systematic manner. However, we did collect two variables which are relevant in this context: nationality and first language(s) of both students and lecturers. Student nationality emerged as a significant random effect in both our statistical models, which indicates that we arrive at a better estimation of the observed (fixed) effects when the students' nationality is taken into account. However, although about 40% of the respondents were non-Danish nationals, we cannot compare the responses of groups with different nationalities because of the way these were sampled, namely randomly and with very varying group sizes. We found an effect of language background, though, in the sense that students who shared the lecturers' L1 rated the lecturer's English lower than did the other students. Since the shared L1 was almost always Danish, it is a matter for future research to determine whether similar effects can be observed for students from other cultural and/or linguistic backgrounds.

5. Conclusion

Our study has illustrated that the statistical techniques adopted above enable us to test the hypotheses formulated in this paper under less controlled conditions. The students' perceptions of the lecturers' English were found to be influenced by their perceptions of the lecturers' general lecturing competence. And perhaps more importantly, we found that the reverse was true as well, that the students' ratings of the lecturers' general lecturing competence were influenced by their perceptions of the lecturers' English skills. This has potential consequences both for the individual lecturers and for the academic institutions. Lecturers whose

English skills are perceived as problematic by their students risk being downgraded on their general lecturing competence, i.e. they are perceived as less competent teachers, which may have serious consequences, for example for lecturers seeking tenure.

Because of the mutual effect the two factors can have on each other, it may be difficult for both the lecturers and for the institution to determine whether any problems noted by students with either language skills or general lecturing competence can really be attributed entirely to one of these competences only. Crucially, our results indicate that universities should be aware that the English skills of their teaching staff will be reflected not just in the students' perceptions of language skills but also in their perceptions of the lecturers' overall lecturing competence, which may have a negative impact on the impression the students have of the academic level of the institution as a whole. In addition, depending on the method used to obtain evaluations of lecturers' English skills, it is likely that those evaluations will not be a reliable measure of the actual communicative competence which is required to be a successful lecturer in an English as a lingua franca setting (cf. Björkman 2010, 2011).

There is evidence that at least some lecturers are aware of the consequences that their English skills may have on students' perceptions of their qualifications in general. Tange (2010: 143) reports how difficult it can be for lecturers to be 'subjected to student criticisms' and how some defend themselves by questioning the students' ability to judge their fluency, while others describe how it has caused them to drop several points in student assessments as compared with evaluations on the basis of classes conducted in their first language. Individual lecturers respond to student attitudes and expectations in different ways, as can be illustrated by the following two cases. In May 2010, the *University Post*, the English-language version of the University of Copenhagen newspaper, published an open letter written by a Polish lecturer to some of his students after he had received a negative evaluation; he stated that their criticism was unacceptable and ill-informed since they believed that when a lecturer's English is not good according to their standards, then the whole quality of the lecturer's teaching [and] the overall educational dimensions of the course are insufficient and bad (University Post, 1 May, 2010, http://universitypost.dk/article/documentation-letter-students-sociology-lecturer). This lecturer's perception of the situation obviously

echoes the general finding we have presented here. A different approach, from CBS[2], may provide a more constructive way forward in dealing with situations of this type. Here, a lecturer who was aware of his own weaknesses with English encouraged his students to assist him in finding the right words and to ask him to clarify matters whenever something was unclear. Combined with the lecturer's considerable pedagogical skills, this helped defuse a potentially problematic situation and let the students contribute actively in creating successful communication and effective learning. Other researchers have recommended different approaches, not only for the individual, but at the institutional level. For example, Vinke et al. (1998) recommend screening of lecturers' English competence, offering courses that focus on the use of English for teaching content courses, assigning lecturers with previous experience of teaching in English to EMI courses and easing the workload of lecturers who start teaching in English. This should improve the quality of the EMI which the students receive. However, while such strategies would push the general level of EMI upwards and thereby reduce the potential threat to the overall image of the institution (and hopefully improve student learning), they do not address the issue of stereotyping. Even if the general level of the lecturers' English is raised, there will still be cases where students are taught by lecturers whose English is in some way "substandard" or non-standard. And although research in English as a lingua franca has shown that native speaker standards, or norms, are not particularly relevant in ELF interaction, such norms continue to exert influence on students' perceptions of the interactions. It is therefore advisable that universities—when interpreting the results of a course evaluation—carefully consider the interplay between students' perceptions of the lecturer's language skills and their perceptions of course content and structure and the lecturer's teaching skills: lecturers who receive low ratings on language and teaching skills are not necessarily seen as *both* poor teachers *and* as having poor language skills but are perhaps seen as poor teachers *because* they are perceived to have poor language skills (or vice versa).

[2] Reported to us by Joyce Kling, University of Copenhagen, who observed the classes at CBS as part of the PLATE project (Kling & Hjulmand 2008).

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Applying transnational strategies locally: English as a medium of instruction in Swedish higher education

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Abstract
Analysing student interaction at an international university in Sweden, this article investigates how the transnational strategy of using English as a medium of instruction can be (re)constructed by students in a local context. The analysis focuses on students' expectations—or norms—for when it is appropriate to use English, and shows that English medium-instruction does not necessarily mean that students speak English all the time. The local language Swedish is used in connection to teaching and students establish local norms for when, how and with whom it is appropriate—or inappropriate—to speak English. A conclusion is that although language choice at the international university is influenced by global factors, it is still firmly a local construction.

1. Introduction

The current processes of globalisation bring about new meeting places for people from different countries and parts of the world. More people than ever live and work in places other than where they were born and the number of students on exchange is increasing. As Appadurai (1996) notes, we live in a "world of flows", where ideologies, peoples and goods, images, messages and discourses move across national boundaries and societies. The world of flows affects social relations and, obviously, "[g]lobalisation is proving to be the salient context for an increasing number of local sociolinguistic experiences" (Coupland 2003: 466).

In this article, I examine how the transnational strategy of using English as a medium of instruction can be (re)constructed in a local context influenced by global flows, namely six international university courses in Sweden. The number of courses in English has increased in Europe as well as in Asia, as part of universities' strategies for internationalising higher education (Ammon and McConnell 2002, Wächter and Maiworm 2008). The official choice of language is thus influenced by transnational strategies and flows, and the international university seems to be a fruitful setting for studying how actors can handle global flows in local contexts.

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I begin with an overview of the international university and how universities function as meeting points for global and local, social and linguistic processes. The overview places the study in the field of sociolinguistics of globalisation and theories and studies presented by Appadurai (1996), Pennycook (2007) and Blommaert (2010). I then give an account of the empirical data and how the transnational method of using English as a medium of instruction can be studied in a local context through analyses of students' language choice in video-recorded classroom interaction. I focus on norms for language choice and how students can construct norms for when it is appropriate—or inappropriate—to use English. The analysis takes its departure in sequences where students or teachers orient towards a certain linguistic system as an instance of deviance and, thereby, simultaneously make visible norms for language choice (Gafaranga 2000). I also discuss participants' attitudes to varieties of English and to the linguistic context. A conclusion that I will come back to is that language choice at the international university is "obviously influenced by global factors, but still firmly local" (Blommaert 2010: 180).

2. The international university

Universities have always been part of an international arena. Throughout history, researchers have collaborated across institutional and national borders, and students have travelled abroad for education. In recent years, however, universities have made a point of emphasising the global character of higher education and formulated strategies, methods and goals for internationalisation.

The strategies, methods and goals are often shared and the internationalisation of higher education appears as a phenomenon characterised by transnational influences and flows. For instance, a reoccurring goal of internationalisation in higher education is that students should learn about others' experiences and world views, be trained in cross-cultural communication and gain a broader perspective on their own culture (Otten 2003).[1] Mobility and exchange of students and staff is a method used, and meetings across cultural and national

[1] The introduction of English-medium instruction has also been compared to a market adjustment and Coleman (2006) observes that internationalisation also is a matter of economics.

boundaries are made possible through the introduction of a global contact language, notably English (Coleman 2006). In this way, courses and study programs in English are part of the process of internationalising higher education, and—just as with other formal aspects of internationalisation—the choice of language is imbued with influences from other national and international contexts. Rather than any other contact language, it is English that is the official medium of instruction across national boundaries in Europe and Asia (Ammon and McConnell 2002, Wächter and Maiworm 2008).

The global spread of cultural forms and languages has been discussed in terms of homogenisation of world culture, Americanisation and media imperialism (see e.g. Phillipson 1992). However, empirical studies at the international university demonstrate that the linguistic environments taking shape are complex and that discussing them in terms of hegemonic lingua franca use is insufficient (Haberland et al. forthcoming). Knight (2004) points out that the internationalisation of higher education means different things to different actors in the field, and Roberts (2008) concludes that there is no one type of international university. The above stated goal about inclusion and learning of others' experiences and world views will take different forms in different contexts (see Brookes and Becket 2011). Moreover, studies from the Nordic countries demonstrate that a number of languages can be used next to English, depending on the participants' linguistic resources and proficiencies (Ljosland 2008, Söderlundh 2012, see also Lønsmann 2011). English-medium education is *nominally* in English, in the sense that English is the official course language, but in practice a number of languages can be used in connection with teaching (Söderlundh 2010). Thus, the international university seems to be formed both by global and local influences and flows.

3. Theory and previous research

The relationship between cultural objects in motion and local take-up of cultural forms is discussed by Pennycook (2007) in a study of the global spread of hip-hop. Pennycook argues that transnational cultural products do not necessarily replace local ones, but are refashioned and given new meanings. Hip-hop artists all over the world use similar patterns of cultural conduct (including certain English expressions) that make hip-

hop into a recognizable sub-culture. But wherever it occurs, musicians interpret and negotiate the cultural conduct of hip-hop, so that the music offers potential for local identity (p. 96 ff.). Thus, the spread of hip-hop does not represent a plain distribution of cultural forms, but "a layered distribution in which local forces are as important as global ones", as Blommaert (2010: 19) points out in his comment on Pennycook's work. Rather than being a process of homogenisation, hip-hop is characterised by a local take-up of cultural forms, as it is interpreted, negotiated and embedded in local, social relations (Pennycook 2007: 6 ff.).

Transferred to practices in higher education, and more specifically to the strategy of using English as medium of instruction, the theory offers explanations to studies reporting that a number of languages might be used in connection with teaching (see e.g. Söderlundh 2012). The use of English as medium of instruction is a strategy of transnational character in the process of internationalising higher education. In its written form it is a strategy of monolingualism, but when applied in actual educational contexts participants can negotiate the strategy so that other languages also can be used. As Appadurai (1996: 17) remarks: "different societies appropriate the materials of modernity differently" and globalisation is itself "a deeply historical, uneven, and even *localizing* process".

Similar processes of 'transculturation' are shown by Hult (2012) in an examination of globalisation of English in Sweden as it takes shape in educational policy and practice. On the evidence of national curricular documents and observations of English language educators, Hult (2012: 251) concludes that English has not simply been transported to Sweden as a lingua franca. Rather, the language has been reconfigured for local purposes so that it reflects local, Swedish views and values. In the process, English is partly framed for purposes in Swedish society (such as the Internet, TV, films etc.) and partly framed as a language "through which the local is made global" (p. 239); a language "through which people in Sweden project themselves in the world of globalized goods and ideas" (p. 240). The duality highlights the fact that globalised linguistic varieties are part of both transnational and local processes. Even though English functions as a worldwide contact language, it can be used and perceived as more than a lingua franca in local and national contexts. When languages circulate around the globe, they become discursively situated in national and local contexts (Blommaert 2010).

A central aspect of linguistic globalisation is the notion of power and inequality (Blommaert 2010). Linguistic resources index social meaning in spaces and situations, and, as Blommaert (p. 33f, 194) observes, they change meaning, function and value as soon as they are moved out of a local context. English seems to keep its value in the contexts discussed here, but as Blommaert observes, many speakers of other languages will find their linguistic resources to be of a lower value in globalised contexts. Access to prestigious varieties has always been a question of power, but processes of globalisation have created new and complex markets for linguistic resources. These are at play at the international university as well, and I will come back to the issue of power at the end of my analysis.

4. The study

The international university appears as an example of a focal point in the world of flows identified by Appadurai (1996). The character of focal point comes from the very process of internationalising higher education, which is apparently imbued with some of the most noticeable characteristics of the era of modernity. Indeed, large-scale mobility, the use of a global contact language and inclusion of others' world views are concerns that apply not only to the domain of higher education, but more broadly to today's globalised world.

With Appadurai's (1996) concept of "world of flows" and Pennycook's (2007) study as a starting point, I proceed by analysing how the transnational strategy of English as a medium of instruction can be constructed locally by students on six courses at a university in Sweden. I focus on norms for language choice and how students can construct norms for when it is appropriate—or not—to use English in actual teaching settings.[2] By *norms* I mean shared—explicit and implicit—expectations concerning social and linguistic behavior. The definition is based on a discussion by Gafaranga and Torras (2001: 198, 2002: 10), and that "any action which has been accomplished must be assumed to have been made possible by a specific and discoverable norm"

[2] The analysis makes visible constructions of norms concerning the use of English and Swedish in a local academic setting. In the data, other languages than English and Swedish only occur in the form of isolated words and switches to languages such as French or Spanish happen very rarely.

(Gafaranga and Torras 2001: 198). However, norms are not necessarily expressed; rather expected actions are "seen but unnoticed", as Heritage (1984: 116) writes, and they pass without comment.

The data were collected for a larger project[3] in 2007 and consist of ethnographic observations of six courses at a Swedish university, interviews with students and staff,[4] and video recordings of study situations. Half of the courses were offered within a faculty of science and technology (in the subject areas of engineering and computer science), half in a social sciences faculty (in the area of business studies). The majority of the students were Swedish, although the number of exchange students varied between the courses. In the engineering courses, one in twelve was a student on exchange, whereas among the business students the proportion was between one in three and one in four. None of the exchange students spoke Swedish within or outside the teaching situation, and on no occasion did they show that they understood the language. All teaching staff included in the study could speak Swedish.

The analysis of constructions of norms is based on the video recordings of whole-class teaching situations in the courses studied. From these video recordings (in total 28 hours) I have extracted sequences where students or teachers talk about the medium of interaction and/or act as if its medium is deviant in relation to the particular situation, or in relation to their voiced expectations regarding language choice. For instance, students and teachers might ask for translations into English from other languages and act as if English is the only expected language in the context, or they might argue that a language is inappropriate—or appropriate—to use. In this respect I follow Gafaranga and Torras (2002), who argue that norms for language choice can be witnessed in sequences where participants react towards the medium of interaction as being deviant. Violations of the norm are noticed by participants and make visible to them—and hence to the researcher—a sociocultural context (Gafaranga and Torras 2002: 10). Thus, the construction of norms for language choice is not necessarily a question of decisions between discrete languages, but a discursive

[3] The project is presented in Söderlundh (2010).

[4] The interview data consists of 2 interviews with teachers, 2 interviews with students on exchange and 7 interviews with students from Sweden. The interviews lasted between 60 and 90 minutes.

construction in which participants point out and orient towards one or more language as the medium for interaction (Pennycook 2007: 136-137, also see Gafaranga 2000).

As a complement to the analysis of how norms can be constructed locally in interaction, I describe what attitudes students and teachers show towards languages and varieties used in the courses and towards students who speak them. The discussion is based on interview data, in which students and staff talk about their views on the linguistic situation and the use of English and Swedish. Nine students and two teachers were interviewed. When discussing general patterns of language choice in the courses I also refer to ethnographic observations.[5] My focus here, however, is on the video-recorded data and how the transnational strategy of using English as a medium of instruction can be constructed locally by students in six courses at a university in Sweden.

5. Constructions of norms for language choice

I first (5.1) exemplify how English is constructed as a lingua franca (see e.g. Mauranen 2003, Seidlhofer 2001) among participants with different linguistic backgrounds. I then (5.2) point to some differences between the courses included in the study concerning when, how and with whom the local language, Swedish, can be used. In the last section (5.3) I discuss students' attitudes towards languages and their speakers in the courses studied, given that power relations are an inseparable aspect of linguistic globalisation. The analysis demonstrates the dynamic relation between transnational flows and local take-up of such forms, and illustrates that language choice at an international university is influenced by global factors, yet is still firmly local.

5.1 English, a lingua franca in class

My first example of how the strategy of using English as a medium of instruction can be constructed in a local context comes from a course in business studies and a seminar on leadership. The sequence (Example 1) takes place in whole-class teaching and is part of the ordinary teaching.

[5] The ethnographic study consists of observations of 38 whole class teaching situations (with an average of 6 occasions – 12 hours – per course) and 13 group work situations (in all 9 hours).

The teacher has just summarised the seminar and is now talking about the importance of common sense among business leaders. Suddenly, the teacher is interrupted by a student who asks for a translation into Swedish of one of the English words that the teacher is using, namely "*prudence*". As will be shown in the analysis, the question leads to a short discussion in which the participants make visible their expectations of the linguistic situation.

The teacher answers the student's question by explaining the meaning of the word *prudence* and points out—in Swedish—that the term is relatively unusual. After a few seconds, an exchange student clears his throat loudly in an unnatural manner (line 15). By doing so, the student draws attention to the teacher's use of Swedish, and simultaneously constructs English as the 'normal' language and Swedish as an unexpected language in the teaching situation. By switching to English and commenting on the language choice, the teacher confirms that English is the language that should be used in the particular context.

Example 1. Prudence (BP 0312v). T: Teacher, S: Swedish-speaking student, X: Exchange student from Canada.

```
1 S:  what is the Swedish word for
2     prudence?
3 T:  sorry?
4 S:  what is the Swedish word?
5 T:  e::: omdöme (0.5) practical      sound judgement (0.5)
6     reason sunt förnuft alltså       common sense well
7     i den positiva (2.5)             in the positive (2.5)
8     °(prudencia) alltså°             °(prudencia) thus°
9     (1)
10 T: å det kan man- >du vet< det      and that you can- >you know<
11    är ingen som vet vad det här     no one knows what
12    är för nåt (1) observera         this is (1) notice
13    (0.5) vad prudence är å det      (0.5) what prudence means
14    är ingen som vet [( )=           no one knows
15 X:                  [((clear his
16    throat loudly. Laughter in class))
17 T: =är man född (1) it is are you    =are you born (1)
18    [born=
19 X: [hh ((laughter. Laughter in class))
20    now he's starting to speak
21 T: =((shrugs)) ( )
22    is it I thought it was (.)
23    ((points at the watch at the wall))
24    after two so I °start Swedish°-
25    ((laughter in class))
26 X: oh [yeah right ((laughter))
27 T:    [e: are you born with that o::r how
28    do you develop this and so on (0.5)
29    (obviously some)(.) a big mentor can (.)
30    teach you
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31    (0.5)
32 T: anyway thank you very much (.) it was rather
33    successful (.) although it was a Monday seminar
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The sequence is part of the ordinary teaching and part of an institutional context. The institutional character is not fixed, but depends on how the participants act and whether they orient to tasks and identities associated with the institution or not (see, for example, Drew and Heritage 1992: 22–25). In Example 1, participants exhibit either a teacher's or a student's perspective, and the topic of discussion is related to business studies in the sense that the translation of the world *prudence* has relevance for the Swedish students' understanding of the subject being taught. Hence, the switch from English to Swedish is made in a sequence of institutional character—a sequence of "on-task" talk—and teacher and students together (re)construct English as the expected language in interactions that are institutional in purpose.

It is also interesting to note the teacher's explanation for talking Swedish. The teacher says—albeit with a humorous twist—that he thought that it was past two o'clock and, therefore, he could speak Swedish. The explanation suggests a division between time in and outside class, which corresponds to a pattern of language choice that was observed in the ethnographic study. In general, English dominates whole-class teaching, but Swedish is used in sequences outside class when Swedes are talking to other Swedish students. The Canadian's laughter and comment (line 20, "now he's starting to speak…") suggests that he has noticed the different norms for language choice in and outside class.

A second example on how students can construct local norms for language choice in the ongoing interaction comes from a group discussion outside class with students in business studies. The students' task is to analyse future problems in the market of clothing design and to write a report to their teacher on the subject. Two of the students are Swedes (called S1 and S2 in Example 2), one is British and one is Greek (named X in the transcript).

Example 2. English (M 0212v). S1: Swedish-speaking student 1, S2: Swedish-speaking student 2, X: Exchange student from Greece.

```
1 S1: this has ((points at her paper))
2     (.) I mean det här har ju med          this has to do with
```

```
3     de här att göra (.) om man          these things (.) if you
4     man ska använda arbetskraft         should use labour
5     och tyger ((turns towards           and fabrics
6     S2)) då blir det lite med           then it would be little
7     de också                            of that too
8  S2: English ((raises her arm and
9     points at S1. X looks up from
10    his papers))
11 S1:yeah (.) I mean this has this
12    it has yeah I wrote something
13    (.) this is kind of
14    the same thing (.) ((continuous in English))
```

In line 2, one of the Swedes switches from English to Swedish; this language choice is soon re-adjusted by the other Swede through a short, but forceful comment (line 8). The question of "using labour and fabrics" has relevance for all students in the group. But S1 turns herself towards S2 when speaking, and she uses a language that only S2 understands. However, S2's comment ("English") challenges the exclusiveness of S1's utterance and her choice of language. By saying the expected code by its name, S2 makes visible a socio-cultural context in which English is constructed as the normal language for on-task interactions among students from different countries.

In a non-institutional setting, similar instances of directness would perhaps be interpreted as rudeness, or even as a face-threatening act (Drew and Heritage 1992: 24). In Example 2, however, S1 answers the challenge without noticeable annoyance and accepts the suggested language by saying "*yeah*" before continuing in English. For practical reasons the participants have to agree upon which language(s) to use, for otherwise the group discussion will break down and the task given by the teacher would not be solved. Hence, the institutional setting might explain that S1 accepts the suggested language without noticeable annoyance.

In Examples 1 and 2, the listeners correct the choice of language and construct English as the expected medium for communication among students with different linguistic backgrounds. However, the speaker may also construct norms for language choice. In the video recorded data, this is for example seen in *language-related episodes* (see Swain and Lapkin 1998: 330) where students ask for help translating non-English words into the English equivalent. The episodes normally follow a three-stage structure in which the student (or the lecturer) in the first stage interrupts herself, points out that she does not know a certain word and then says the word in another language. In the second stage,

someone in class gives the missing word and, in the third stage, the first person confirms that she has heard the word and repeats it in English. After the third stage participants resume speaking about the subject discussed before the language question.

The structure is illustrated in Example 3, which shows a transcript of a sequence from one of the courses in business studies. The teacher and the students discuss the company IKEA and whether or not its founder Ingvar Kamprad can be said to personify a good leader.

Example 3. Foundation (BP 0312v). T: Teacher, S: Swedish-speaking student, C: Students in class.

```
1 T:  how is he using ( ) is he [( )
2 S:                            [°he he's°
3     he's compared to i- in Sweden we we e::
4     (0.5) we we think Kamprad is e:: is a
5     good man (0.5) most Swedes do .hh
6     and bu- but he is not paying taxes
7     (.) actually that (1) the rest of us
8     is are doing he has a stiftelse                foundation
9     (.) °I don't know what it's
10    [it's called°
11 C: [foundation
12 S: foundation in the:: Holland (1) so is that
14    ethical (.) in that sense?
```

In line 8, the Swedish-speaking student initiates a language-related episode by switching to Swedish and saying “I don’t know what it’s called”. The student’s meta-comment clearly signals that he is changing languages and that Swedish is not expected in the context (Gafaranga and Torras 2001). Most language-related episodes in the data include switches to Swedish. Exchange students make use of other languages on only two occasions. Firstly, a Spanish student uses her competence in Spanish, asking for help with the English word for “fault”. Secondly, a student from French-speaking Canada asks for help with the production of English by switching to French.

Similar translations from Swedish, French or Spanish in language-related episodes maintain a monolingual English interaction. By switching to another language and simultaneously asking for a translation, the speaker orients as if the other language is an instance of deviance, and he or she constructs English as the only expected language for interaction (Gafaranga 2000: 330). Gafaranga calls the switch a *medium-repair*, in which a speaker orients towards a linguistic item as an instance of deviance, and simultaneously demonstrates his or her own

expectations regarding the choice of language. Hence, language-related episodes show that neither Swedish, nor French or Spanish, is part of the jointly established norm for whole-class interactions on the task; rather, immediate translations into English indicate that these languages are instances of deviance.

In sum, Examples 1-3 show how students construct English as the expected or normal language for on-task discussions among participants with different linguistic backgrounds. The norm is built up by the very use of English and by additional constructions of other languages as instances of deviance.

5.2 Restricted use of English

The norm of speaking English does not apply to all situational contexts in class, however. The local language Swedish holds a special position in the studied courses, and sometimes Swedes speak Swedish instead of English in whole-class situations. By doing so they depart from the other consistent norm of speaking a language that all participants can understand, and they challenge the position of English as a lingua franca suitable for all situational contexts.

When, how and with whom Swedish is used varies somewhat between the six courses. In most cases, Swedish is heard in interactions or sequences in class that are preparatory to learning or teaching. The aim and roles at play in these sequences are institutional, but the topic is 'off-task', in that participants are not talking about the actual course subject. For instance, Swedish is used in roll-calls, questions concerning group presentations, queries about forthcoming exams and so on. In these specific contexts Swedish is never oriented to as deviant; rather the use of Swedish in teaching related contexts seems to be part of students' jointly established norm. The link to a specific situational context gives Swedish a function of a contextualization cue (Gumperz 1982), pointing out a certain interaction or sequence as preparatory to the actual teaching and learning.

Indirectly, the use of Swedish in a certain context also functions as a restriction of the use of English as a lingua franca. When speaking Swedish in certain situational contexts, Swedes challenge the functions of English as a lingua franca suitable for all interactional contexts. By speaking Swedish, they highlight the preparatory character of the

context, but they also strengthen the construction of English as a language for on-task interaction in class. Thereby, the use of Swedish sheds further light on how norms for language choice can be constructed in the ongoing interaction. English is the expected lingua franca for on-task interactions in class, yet it is not necessarily the expected language for all situations where students from different linguistic backgrounds meet and interact.

The local character of norms for language choice in the courses studied is also evident in the last course where Swedish does not function as a contextualization cue. In this course at the faculty of science and technology, students speak Swedish more often and sometimes they make use of Swedish in interactions that are on-task. They pose questions in Swedish, present their work in Swedish and talk Swedish in discussions with peers (Söderlundh 2010). By doing so, they interpret the linguistic situation in a different way than their fellow students, and they construct norms for Swedish and English slightly differently. Instead of constructing English as a shared lingua franca, Swedes associate English with exchange students, while Swedes—who constitute the majority—can choose between English or Swedish. Thus, the course demonstrates that norms for language choice might differ between local contexts, and that norms can be constructed by participants on a local course basis. The use of Swedish in on-task contexts in class does not appear in other courses studied; rather it is a firmly local construction.[6]

5.3 Language choice and aspects of power

Similar to other implicit or explicit expectations concerning social and linguistic behavior, the construction of norms for language choice is linked to power and inequality. The group of Swedish students sets the agenda and it is, in most cases, their linguistic preferences which determine how norms for language choice can be constructed in the local contexts. Foreign students only treat Swedish as deviant if their Swedish

[6] In Söderlundh (2010), I explain these differences with two contextual circumstances: firstly the number of exchange students and, secondly, the approach to teaching. Courses at the faculty of sciences and technology are to a higher degree characterised by a traditional, individual-based approach to teaching. The business study courses, on the other hand, rely largely on group-based methods, such as seminars and group work. In the latter context, social pressure arises regarding language choice and it is not acceptable to use a language that not all participants understand.

peers have already done so (see Examples 1 & 2). They challenge the use of Swedish in whole-class teaching interactions that are on-task, but not in interactions preparatory to these contexts. Although the norms put them at a disadvantage, the exchange students adapt to the expectations of the majority, and it is those expectations which mould interaction.

With this in mind, the Swedish language stands out as a rather powerful resource in the courses. According to the norm, English is the expected or normal lingua franca in on-task interactions in class, but in certain interactional contexts Swedish constitutes a legitimate alternative. For example, one of the teachers exemplifies this when she gives instructions before an upcoming exam in business studies:

> The ones (pause) the Swedes are of course allowed to write in Swedish and the non-Swedish speaking people are allowed to write in English, or are supposed to write in English. (Teacher in business studies)

The status of Swedish is established locally in interaction but, obviously, is also related to the broader context of the university courses. Swedish is the language of the surrounding society, and also the first language of the majority of participants.

The special position of Swedish indicates that language choice rests not only on the basis of mutual understanding. In the interviews, Swedish students say that the use of English impacts on social relations with other Swedes. English is perceived as the exchange students' language and associated with students from countries other than Sweden. Accordingly, Swedes talk English to all exchange students, whether they come from Spain, France or Britain and regardless of their actual linguistic skills. The Swedes, in turn, are not as clearly associated with English, even though their relationship to the language is in fact similar to that of their German and French peers. The Swedes are instead associated with English *and* Swedish, and this link to two languages rather than one separates the Swedes from other foreign or second language users in the courses.

Accordingly, English functions as a lingua franca in the courses studied, but it is also a language that indexes certain values and views among the Swedes (Hult 2012). As pointed out by Blommaert (2010: 33f, 194), the prestige of certain linguistic resources is linked to spaces and situations, and when linguistic resources are moved out of a local context, they change meaning, function and value. Obviously the

special position of Swedish relates to contextual circumstances such as Swedish being the language of the majority and of the surrounding society. In other linguistic markets the value of Swedish would change and its special position would be questioned.

Attitudes towards Swedish are not the only views circulating in the studied courses. Beside the positive attitudes towards Swedish, students show varying attitudes towards varieties of English. The varieties spoken by native speakers are perceived as prestigious and exchange students from Canada, Unites States of America or Australia are asked about English grammar and pronunciation, as exemplified in Example 4.

Example 4. Egalitarian (BP 0305v). S1: Swedish-speaking student 1, S2: Swedish-speaking student 2, T: Teacher, C: Students in class. X: Exchange student from Canada.

```
1 S1: background to this article is that an ongoing
2    process of (1.5) e:: (.) eg- eg[ala
3 S2:                               [((giggles))
4 S1: hh I don't really know how to pronounce that
5    (0.5) e: ega- (1.5) egala- (0.5) tarism
6 T:  ((points at X)) >why don't you ask< ((points again))
7 S1: how do you pronounce [the e-word
8 X:                       [sorry buddy
9    (3)
10 X: oh egalitarian?
11 S1: >yeah< the [increasing amount of=
12 C:             [((giggles))
13   =e- egalitarian e: theorists (0.5) that
14   implying tha- that leadership based on
15   inequality is unethical
```

In Example 4, the teacher asks an English-speaking student from Canada how the word "*egalitarian*" should be pronounced. The question relates to an oral presentation, in which a Swedish-speaking student first uses the word in its written form, but then hesitates when he should say it out loud: "*I don't really know how to pronounce that*" (line 4). The teacher suggests that the student from Canada should help him to pronounce the word (line 6). Their actions position them as less competent speakers of English.

Attitudes towards different varieties of English impact on the social environment of courses. In interviews, native speakers of English are talked about as particularly useful members in group discussions and other tasks given by the teacher, since they can help non-native speakers of English to solve language problems in texts and oral presentations. Exchange students with other linguistic backgrounds are not associated

with similar positive values, and their Englishes are not as valuable as varieties of native English in the local orders of indexicality (Blommaert 2010: 194). Students from France or Spain have to prove that they know the language well enough, but they also have to prove that they are good students who can contribute to the group work. The data thus also exemplify how linguistic resources change value when they are moved out of a local context (Blommaert 2010: 194). In fact, varieties that index native knowledge of English (or *almost* native knowledge) appear as the only truly, non-negotiable mobile linguistic resources at the international university.

5.4 Summary and discussion

The analysis exemplifies how the students in the study can construct local norms for languages in English-medium courses. Rather than talking English all the time, English is oriented to as the expected, 'normal' choice of language when the interaction is institutional in purpose and when the topic for discussion is business studies or technical sciences. As has been shown, however, norms for language choice can be constructed differently in different courses, as negotiations are taking place on a local course basis. Swedish is used in connection with teaching in all courses, but when, how and with whom the language is used varies somewhat between the different courses. In general, Swedish is used in interactions in class that are preparatory to the actual teaching, while oriented to as deviant in discussions that are on-task. The use of Swedish as a contextualization cue strengthens the construction of English as a lingua franca for interactions that are on-task, and restricts the use of English in other situational contexts.

Rather than using English in all study situations, the local norm seems to be based on calculations of other participants' linguistic competence. Students choose the language that seems most fitting to the kinds of roles and aims that the interaction revolves around, but also in relation to their own and other participants' language skills. Yet mutual understanding is not the only basis for language selection, since Swedes sometimes speak Swedish in whole-class teaching sessions where exchange students are present. Particularly, social relations among the Swedish speaking majority influence language choice, and—as has been shown—power relations and aspects of inequality are at play in all

studied courses. As pointed out, varieties that index native knowledge of English, or *almost* native knowledge, appear as the only truly, non-negotiable mobile linguistic resource at the international university.

In relation to localisation processes, the analysis shows that the transnational strategy of using English as a medium of instruction does not necessarily mean that students speak English all the time. Students can construct local norms for when it is appropriate to use English, Swedish or other languages, and they can reconstruct the transnational strategy of English as a medium of instruction so that it fits local expectations, traditions and ideologies. For instance, English is constructed as a language that first and foremost belongs to the exchange students, while Swedes are associated with English *and* Swedish. The associations are constructed locally in interaction and illustrate Pennycook's (2007: 94) observation that transnational products and flows can be refashioned and given new meanings in a local setting. The strategy of using English is transnational; still, patterns of language use show that students can construct local norms and (re)create language choice on a local course basis.

The international university appears as a rather stable structure in the world of flows. Its rather stable character comes from the local negotiations of norms as well as local take-ups of English as a medium of instruction. It places the international university among other apparently stable structures, organisations and social forms that Appadurai (2000: 5) identifies in parallel to objects in motion in the world of flows. According to Appadurai, these apparently stable forms function as a structuring force in the world of flows, as they are devices for handling objects in motion. Indeed, with the international university as a rather stable framework, students and staff can (re)construct the transnational strategy of English as a medium of instruction so that it fit local purposes, through direct comments and negotiations (Examples 1 & 2), language-related sequences (Example 3) or use of languages other than English in situational contexts that are off-task.

6. Conclusion

Like other internationalising strategies in higher education, English-medium courses are characterised by interplay between transnational, local and national processes and flows. At the Swedish university studied

here, students handle the world of flows by creating and recreating local norms for when, how and with whom English can, and can *not*, be used. The linguistic environment is first and foremost a local product, even though students and teachers obviously are influenced by the official language choice and by the global function of English as a lingua franca.

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Learning terminology from reading texts in English: The effects of note-taking strategies

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Abstract
Student note-taking strategies can provide an insight into how students learn subject-specific terminology in L2 from L2 reading. This article explores the relationship between reading, note-taking strategies, and the learning of English terms among Swedish students. Students participated in an experiment in which they were presented with new terminology and could take notes. Their learning was measured with a multiple-choice test. Results show that students who took more extensive notes and who engaged with the text better learnt more terms. Pedagogical implications for subject and LSP teachers are discussed.

1. Introduction

Because of the increasingly important status of English worldwide, learning the language is rapidly becoming an aim, if a secondary one, of many university courses around the world. Typically, English proficiency is expected of the many students in Europe and in other parts of the world who attend courses in English instead of the local language. However, it is not only these students who are expected to learn English terminology. A growing number of students today attend parallel-language courses (Josephson 2005), in which they listen to lectures given in their local language, but read textbooks written in English (Graddol 2006, Kuteeva 2011). These students are primarily expected to learn terminology in their L1. However, the secondary objective of many of these courses is also the acquisition of terminology in English (Pecorari, Shaw, Irvine, Malmström and Mežek 2012), so these students are expected to acquire bilingual scientific literacy in their L1 and English (Airey and Linder 2008). Consequently, as the subject-specific terminology taught in the lectures is often in the local language, they are usually expected to learn new English terminology from their reading only. How students read English texts and learn terminology from them is, therefore, of interest to both subject teachers and teachers of language/English for specific purposes (LSP/ESP). In this article I investigate the relationship between reading and the learning of English

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terms of Swedish students, with a specific focus on the students' note-taking strategies.

Learning subject-specific terminology in L2 differs from learning the more general L2 vocabulary. In acquiring a new word, technical or otherwise, the learner needs to learn the word's form, meaning, and its use (Nation 2001). In some cases, such as with much low-level vocabulary, learners are able to map the form of the word onto a meaning which already exists in their L1 (Jiang 2002, 2004). In other cases, the learner also needs to acquire the new meaning as well. This is predominantly the case when it comes to learning subject-specific terminology. Students learning terms in a subject area new to them do not only have to learn a new form; the concept is often new to them as well. Subject-specific vocabulary is thus a "part of a system of subject knowledge" (Chung and Nation 2004: 252) acquired in connection with that new subject knowledge, both of which are, when learnt, integrated into the learner's pre-existing knowledge (Koda 2005).

In order for teachers to be able to offer adequate LSP instruction to students, we need to know how students learn subject-specific terminology in L2. One way of investigating this is to study the students' reading notes, as these provide insight into how they understand the text and the strategies that they employ to learn the new terminology. Note-taking while reading to learn is a very common practice among students (Hedgcock and Ferris 2009), which has been proven to predict test success in several studies (Peverly, Brobst, Graham and Shaw 2003, Peverly and Sumowski 2012). Taking notes promotes deep understanding (Williams and Eggert 2002), since it involves several processes: comprehension, selection, and production (Piolat, Olive and Kellogg 2005). To take notes successfully, students thus first need to understand a text, after which they need to be able to select information relevant to their learning goal. Subsequently, they need to transform that relevant information into a format that makes the content of their reading easily accessible and comprehensible to them. Notes can thus provide valuable information about how students attempt to learn and what part of the body of content they understand.

Various factors associated with note-taking have been shown to affect learning positively. One of these factors is the amount and type of notes that students take and do not take. Students perform better on tests if they take more notes (Kiewra and Benton 1988, Peverly et al. 2003,

Song 2011). They tend to remember more of the content of a lecture or a text if they take copious notes in terms of the number of words or propositions. They also remember more details and outperform non-note-takers on tests if they note more high-level ideas (Peverly et al. 2003).

How notes are formulated has been shown to affect learning success as well. Some studies have looked at the language of notes and analysed them based on how close they were to the original text (Piolat, Olive and Kellogg 2005, Stefanou, Hoffman and Vielee 2008). Stefanou, Hoffman and Vielee (2008) looked at what proportion of student notes was a verbatim copy, a paraphrase, or the student's own contribution. They found that, unlike students who copied or paraphrased information from the lecture, those who related it to their own ideas performed better on the test following the lecture. Their findings suggest that students whose notes contained unique ideas achieved a deeper understanding of the content, because they were able to draw conclusions that their peers who mainly used verbatim copies and paraphrases were not able to.

The closeness of notes to the original text (e.g. lecture) may be connected with the comprehension of the content. Students have claimed that they use verbatim copies "to ensure fidelity of what was said by the teacher", and paraphrases "to ensure that they understood the teacher's explanations" (Bonner and Holliday 2006: 797). Similarly, in the context of assessment writing, students have explained that "sometimes when you paraphrase something, you just miss the point of the book" (Pecorari 2008: 104). These examples suggest that students might use verbatim copies when they are unsure they have understood the content, and paraphrases when they do understand. The closeness of notes to the source text may, therefore, indicate whether the students understood the text and perhaps even whether they have reached a deeper level of understanding of the content.

However, understanding of the content in part depends on the time the students have available to process the content. In L2 lectures, where time is very limited, students have reported that they mainly focus on writing notes and not on understanding (Airey 2009). Time is also a factor in learning from reading, as reading academic texts in L2 takes more effort and time, which results in students reading less (Pecorari, Shaw, Malmström and Irvine 2011). For these reasons, it is very important for students to use efficient procedures for learning during the limited time they have available.

Due to the number of students who are today learning from L2 texts, it would be useful to know what kinds of strategies these students employ. LSP teachers need to be able to help these students become more effective note-takers who adopt appropriate strategies for the time they have available. Studies of student notes have, however, primarily focused on note-taking strategies from lectures (Kiewra and Benton 1988, Song 2011, Stefanou, Hoffman and Vielee 2008). Fewer studies have investigated the effects of notes on learning from reading (Peverly et al. 2003, Peverly and Sumowski 2012). In particular, studies of L2 students' note-taking strategies have mainly focused on listening and not on reading comprehension (Carrell, Dunkel and Mollaun 2004, Clerehan 1995, Song 2011). In addition, previous studies all explored the effects of note-taking strategies on the learning of the general content in the oral or written texts, and not on the specific goal of learning terminology. The effect of students' note-taking strategies for the increasingly important task of learning L2 terminology from written texts has thus not yet been investigated.

2. Research questions

This article will explore the relationship between reading, note-taking strategies, and the learning of English terms of Swedish students. More specifically, it will focus on answering the following questions:

1) What are the note-taking strategies of students learning L2 subject-specific terminology from reading?
2) Are different strategies used for different vocabulary items?
3) Do the strategies of successful and unsuccessful learners differ?

3. Methods

3.1 Participants

The participants in this study were undergraduate students at a major Swedish university who were in their first term of English studies. One hundred and eighty-one (181) students took part in the experiment, which was a part of a larger study. A majority of the students (56%) were 21 years old or younger. Almost half of the students (48%) were new to

university studies and 27% of students reported being bilingual in Swedish and another language. This sample is representative of students at this institution studying this particular subject. Students were aware that participation was voluntary.

3.2 Materials

This experiment was a part of a larger study exploring the learning of subject-specific terminology in the parallel-language environment (e.g. Pecorari, Shaw, Irvine and Malmström 2011, Pecorari, Shaw, Malmström and Irvine 2011, Pecorari et al. 2012). The entire experiment consisted of several parts. Students read an English text on the subject of rhetoric and listened to a short lecture on the same topic in Swedish. The reading text presented fifteen terms, ten of which were also introduced in the lecture. In other words, five terms were in the reading only. The students were tested on the terms at three points: before the reading and listening event, immediately after, and after a delay of one week. They were free to take notes on the reading sheet or on a separate sheet of paper which was collected before the immediate post-test. They only had access to the reading text while reading. As this study focuses on the note-taking strategies of students learning terminology from reading, the data considered here are those notes taken on the terms which were presented only in the reading.

3.2.1 Reading text

The reading passage was a textbook-like introduction in English to rhetorical devices (see Appendix 1). The text was 885 words long and students were given 15 minutes to read it, after which time they were asked to stop reading. They were instructed to learn the terms in the text using their usual learning strategies. Participants were instructed to read as much of the text as they could, and, in the event that they did not finish reading, to mark the point at which they had stopped reading when time was called.[1]

[1] It is important to note that while all of the students who made a mark in the reading text can be supposed to have read less than all of the text, those who made no such marks could include some who read the whole text and some who did not follow instructions.

The first paragraph of the text was introductory; the rest of the text was dedicated to terminology. The rhetorical terms were grouped into five groups of three related terms, each group in a paragraph of its own, and each group including one term which was in the reading only. Every term group was introduced with a reference to the shared group characteristics. After that, the specific rhetorical figures were elaborated on. Each term was given approximately similar treatment. Each was defined and exemplified with two to three examples of the rhetorical figure, and every description also included some additional details. For example, *antimetabole* was described in a group of figures "relying on repetition" (term group characteristic). It was described as "involving presenting terms in one part of a sentence and reversing them with the same grammatical function in another" (definition) and exemplified with a famous quote by John F. Kennedy (detail): "Ask not what your country can do for you, ask what you can do for your country" (example).

In the order of presentation in the text, the terms focused on in this study are: *oxymoron*, *prozeugma*, *antimetabole*, *parrhesia*, and *paramythia*. For details of these terms, see the reading text (Appendix 1).

3.2.2 Immediate post-test

This fifteen-minute test was taken directly after the learning events. It consisted of a portion asking participants whether they recognised words and a multiple-choice component testing their ability to match the fifteen terms in the text with their definitions. Since in the target situation the language of instruction is usually Swedish, even though knowledge of terms in English is expected, the students were given a definition of a term in Swedish, and a choice of four terms in English, one of which was the correct answer. The students received one point for every correct answer. The maximum score for this study was five points.

3.3 Analysis of student notes

The reading passage and notes pages with any notes the students took during the reading and the lecture were collected before they took the knowledge test. The notes were analysed according to the quality and type of information the students had taken notes on (selection), and how they transformed that information into note format (production). The

analysis thus focused on two aspects of notes: (i) the types of information the students included or excluded from the notes, and (ii) the level of language transformation of the original text into note form. The categories of analysis for the two aspects emerged from the data under the guidance of categories in previous studies.

The types of information the students noted were the following: 'general information on rhetoric', 'term', 'term group characteristics', 'definition', 'example', and 'detail'. These are defined and exemplified in Table 1.

Table 1. Categories for the analysis of types of information given

Category	**Definition**	**Example**
General information on rhetoric	Any information found in the introductory paragraph of the reading text	Study of using language → ancient Greeks & Romans Rhetorical skills
Term	The name of rhetorical figure	antimetabole[a]
Term group characteristics	The characteristic the entire group of terms have in common as specified in the reading text	repetition
Definition	An explanation of the rhetorical figure (e.g. what it does, how it is structured)	presenting reversing
Example	An example of the rhetorical figure	ask not
Detail	Additional information found in the reading text which was not necessary for the understanding of the term	JFK

a. Student's example: *antimetabole = repetition, presenting reversing (JFK ask not)*

The notes were also analysed according to the strategies used to transform the language of the source text. Categorising the relationship between two texts is inherently problematic. For this reason, some research on source use has simply counted words in common rather than establishing categories (Pecorari 2003, 2008), and some of the previous research on notes limited the strategies to verbatim copying, paraphrasing, and students' original ideas (e.g. Stefanou, Hoffman and Vielee 2008). This analysis, however, used several categories to be able to distinguish between levels of transformation. The categories are defined and exemplified in Table 2.

Table 2. Categories for the analysis of transformation from the original text to note form[a]

Category	Definition	Example
Zero transformation: Verbatim copying	Word-for-word copy of lexical words or sequences from the reading text	**one verb working in several clauses**
Non-lexical additions	Addition or change of non-lexical words (articles, prepositions, etc.) which do not add new meaning	one verb working in several clauses **but** with different meaning
Close transformation	Transformation of a text by changing the word class or grammar, abbreviating, using symbols	**concentration** **use** (**1** verb) **diff mean**
Rephrasing	Rewriting the text using the students' own words (e.g. synonyms)	using one verb **to function** in **multiple** clauses
Translation	Direct translation or the rephrasing of the English text into another language	**samma verb olika mening** *[translation: same verb different meaning]*
Original ideas	Students' own unique ideas not found in the text	combined diff. meanings… w/ verb… **collocation?**

a. All examples below are transformations of: *[...] a concentrated style by using one verb working in several clauses of a sentence often with a different meaning [...]*. The text transformed using the transformation strategy in question is marked in bold.

At the top of the table are 'zero transformation' ('verbatim copying') and 'non-lexical additions', which are strategies where the changes to the language of the original text are non-existent or minimal. The strategies which follow, 'close transformation', 'rephrasing' and 'translation', all involve more originality and effort on the part of the student, as the changes are more substantial, although still primarily based on the original text. Last in the table is the category of 'original ideas', which is the most advanced transformation of the text, as the student establishes and notes connections not specified in the text. Important to note here is that in some of the cases, including the examples given in Table 2, students used several strategies to transform one piece of text.

The results of the analysis of note-taking strategies were used to determine the strategies students used in general and for different terms. Their strategies were also correlated with performance on the knowledge test.

4. Results

A large majority of students (87%) who participated in this study took notes during reading. The others chose not to take reading notes and instead only read or occasionally underlined words in the reading text. Almost all note-takers wrote their notes on a separate piece of paper; only four students wrote all or a part of their notes in the margins of the reading text, and a small percentage of note-takers (13%) both took notes and underlined words in the reading text. The notes on the rhetorical terms focused on in this study were fairly brief. On average, student notes on the five terms were only twenty-four words long.

4.1 Selected types of information

Not all students who took notes copied the term they read about. For example, while some students took notes on *oxymoron*, the actual word *oxymoron* did not feature in their notes. On average, students took notes on four (4.08) of the five terms investigated, noting a variety of information about them, with definitions and examples most common (see Table 3).

Almost all (96%) of the students noted definitions at least once, with the average student noting definitions for over three terms. Seventy-three per cent (73%) of students wrote examples with an average of 2.14. Other types of information were less common. Only twenty-four per cent (24%) of students noted term group characteristics, so this type of information was overall rather uncommon.

Table 3. Percentage of students (n=158) using the given type of information, and the mean number of terms described using this type of information

Definitions	% students	96
	M n terms	*3.41*
Examples	% students	73
	M n terms	*2.14*
Term group characteristics	% students	24
	M n terms	*1.32*
Details	% students	15
	M n terms	*1.08*
General information on rhetoric	% students	11

Very few students also noted details (15%) and general information on rhetoric (11%), probably because they had been told that the terminology would be the focus of the test. The students, therefore, chose definitions and examples as the types of information which they believed would help them learn the rhetorical terms. However, both a definition and an example were rarely given for the same term. On average, only one term (1.04) in the whole set of a student's notes would receive both. Examples of the three most common types of notes in this study are in (1)-(3).

(1) parrhesia = being to direct/insult[2]
Definition only
(2) sweet pain – oxymoron
Example only
(3) paramythia – expressing consolation encouragement
"tomorrow is another day"
Definition and example

4.2 Transformation strategies

Even though the students were writing in their second language, almost all of them wrote the notes in abbreviated form. Only two students used complete sentences when describing terms (example (4)); the rest wrote the name of the term and then either inserted a symbol, empty space, or similar, to separate it from the description of the term, as shown in, for example, (1)-(3) in the previous section.

(4) Prozeugma is when one verb can be implied in several clauses.

Students used a variety of strategies when taking notes and they often mixed them. Table 4 shows the percentage of students who used specific strategies when transforming the text into their notes. The most common strategy was zero transformation (verbatim copying). The shortest sequence was one word long, and the longest twenty-one words. Almost all students used this strategy in their notes, which usually consisted of copying the text word-for-word from the reading text and sometimes removing some of the non-lexical words, such as articles.

[2] All examples given in the article are the students' own writing and no changes have been made to them.

Table 4. Percentage of students (n=158) using transformation strategies

	% students
Verbatim copying	98
Close transformation	75
Rephrasing	46
Non-lexical additions	35
Original ideas	21
Translation	14

The second most common strategy was to transform the text so it still closely resembled the original.

(5) Parrhesia – too **rude** or **direct**.
*[original: too **directly** or **rudely** insulting]*
(6) **1** verb → several clauses → prozeugma
*[original: **one** verb **working in** several clauses]*

Many students changed the word class or the grammar, as shown in (5) where the student changed the adverbs ('rudely', 'directly') into adjectives ('rude', 'direct'). Almost all of these students also used symbols to replace words or to transform the syntax of the text, which is something that has previously been pointed out as a very common strategy (Piolat, Olive and Kellogg 2005). Example (6) shows the use of arrows. Abbreviated words were generally less common than transforming syntax, as only about a half of these students used them in their notes.

Other strategies were used by fewer students, but still fairly common. The strategy of rephrasing the text and using their own words was used by about a half of the students (46%) and non-lexical additions by about a third (35%). These strategies were typically used in connection with others, as in (7), where it is shown how a student rephrased a part of the sentence ('playing with the order of words [. . .] the meaning'), used a close transformation ('to reverse') and then copied the last half of the sentence verbatim ('with the same grammatical function').

(7) Antimetabole → **Playing with the order of words** to reverse **the meaning** / with the same grammatical function.
[original: presenting terms in one part of a sentence and reversing them with the same grammatical function in another]

Writing original or unique ideas was a strategy which not many students employed. Only thirty-three students (21%) noted any original ideas. These were usually student attempts to further narrow the definition as in (8), or the students' own examples, such as (9).

(8) Oxymoron – opposition **but not love-hate**
(9) Paramythia – [. . .] **It's not u, its me**.

Only five students provided a mnemonic device. For example, in (10) the student connects the entire form of the term to a detail found in the original text. The student wrote that 'Kennedy' (detail), who was known to use *antimetabole* and whose famous quote was given as an example in the reading text, 'can't' (anti-) 'metabolize' (-metabole) 'anymore'. In this way the student connected the form of the term to the detail and even to the example given in the reading text, even though the student did not write it down.

(10) antimetabole = Kennedy can't metabolize anymore cuz he's dead

More students used formatting only for clues to the meaning of the term. For example, some students underlined 'moron' in *oxymoron* and wrote *antimetabole* as 'anti-metabole'.

Only twenty-two students (14%) chose to take some of their notes in a language other than English, perhaps surprisingly given that only six self-reported English as a first language. All of the non-English notes were in Swedish except for one in German and one in Spanish. Only two of the students who took notes in a language other than English took the entirety of their notes in one language, while others instead mixed the two languages. For example, they would write a definition in Swedish and the example in English, as in (11), or they would write descriptions of terms in two languages, such as in (12), or sometimes vary the language from term to term.

(11) prozeugma = **mening med två motsättningar**
He took a drink and photo…
[translation: sentence with two contradictions]
(12) (sweet/pain) mutually contradictory terms = oxymoron (**ta bort mening genom motsats**)
[translation: remove meaning through contradiction]

4.3 Note-taking strategies for different terms

As has been mentioned before, not all students took notes on all terms. Table 5 shows that some terms were noted by a higher percentage of students than others. The percentage correlates with the position of the term in the text. *Oxymoron*, which was at the beginning of the text, was written down by most students (90%), whereas *paramythia*, which was at the end of the text, was noted by 56% of the students. Thus the further into the text the term was, the fewer students copied it and made notes on it, possibly because they were running out of time or because their interest was waning.

The note-takers used different strategies for different terms (Table 5). From a complex pattern, two things stand out when it comes to the types of information the students wrote.

First, the further into the text the term was, the fewer students cited examples for it, probably because they were running out of time. Second, apart from examples, the information type strategies (such as definitions, etc.) were used by a similar percentage of students for all terms except *antimetabole*. For *antimetabole*, a smaller percentage of students wrote definitions; instead, the percentages of students writing term group characteristics and details were higher than for the rest of the terms. The cause of this could be that the term group characteristic (‘repetition’) and detail (‘John F. Kennedy’) were more familiar to the students than the term’s fairly long and complex definition, so more students relied on them instead of on the definition.

Some language transformation strategies were also used by similar percentages of students for all terms, such as verbatim copying which was the most popular, and translation and original ideas which were on average used by the smallest percentages of students. However, the percentages of students using the other transformation strategies were different for different terms.

Table 5. Percentage of students (n=158) using strategies for individual terms (in the order of their appearance in the source text)

		Terms				
		oxy	pro	anti	parr	para
Students writing term	n	142	137	132	120	89
	%	90	87	84	76	56
% n noting type of information	Definitions	84	88	67	90	92
	Examples	53	45	36	33	25
	Term group characteristics	3	1	24	8	3
	Details	1	1	16	3	0
% n using transformation strategy	Verbatim copying	91	91	83	86	80
	Close transformation	18	37	37	40	30
	Rephrasing	6	31	33	12	11
	Non-lexical additions	6	22	16	5	2
	Original ideas	8	10	8	3	10
	Translation	6	9	10	7	10

For example, close transformation was used by a significant percentage of students for all of the terms but *oxymoron*. Apart from this, the percentages of students who used the different strategies for *oxymoron* were fairly similar to *parrhesia* and *paramythia*. The difference in the use of close transformation could be explained by the fact that in *oxymoron* the definition and examples were two-word phrases which many students could quickly write using only the strategy of verbatim copying, whereas in *parrhesia* and *paramythia* they were more complex. These types of text characteristics may also be the reason why a higher percentage of students used non-lexical additions and rephrasing in *prozeugma* and *antimetabole*, which had complex and long definitions. Student strategies therefore appear to be steered by individual characteristics of the material to be learned.

4.4 Post-test results

The experiment was designed to present participants with terminology which was new to them, and indeed the pre-test showed that informants had a very low level of knowledge of the terms to start with. In general,

neither the note-takers nor the non-note-takers performed particularly well on the post-test. On average, both groups were able to correctly match the definition and term of fewer than two rhetorical figures (see Table 6).

Table 6. Post-test results (max=5)

	n students	% all students	Average test score (SD)
All students	181	100	1.87 (1.47)
Notes	158	87	1.87 (1.46)
No notes	23	13	1.87 (1.55)

Nevertheless, a notable difference could be observed when comparing the distribution of students among scores. As can be seen in Figure 1, the percentage of note-takers who achieved the scores zero to three points did not vary (20-23%), whereas a much larger percentage of students who did not take notes achieved one point (43%), and a very small percentage achieved three (4%). When it comes to the top scores (4-5 points), the students who did not take notes performed slightly better than the note-takers. However, as the standard deviations of both groups are fairly similar (1.46–1.55), this difference between the groups is not significant. The result of a chi-square test, as well, means that a similar conclusion needs to be drawn (χ^2 (5, N=181) = 10.28, p=.07). These results can only be suggestive though. The range of the test was very small (0-5 points) and the group of non-note-takers was small as well (23 students). The Shapiro-Wilk test of normality showed that neither of the groups of students have a normal distribution (note-takers p=.000; non-note-takers p<.01), so parametric tests cannot be used. These differences, therefore, should not be taken as significant, but only as suggestive.

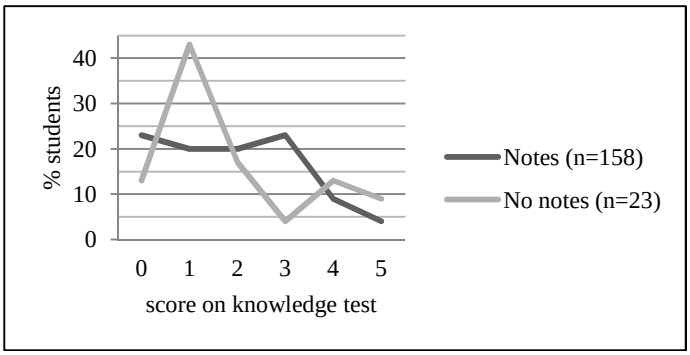

Figure 1. Percentage of note-takers and non-note-takers achieving a particular score on the knowledge test

Low knowledge test scores might be due to the limited reading time. The students were instructed that if they did not complete the reading passage, they should mark in the text where they stopped reading. None of the non-note-takers made any such marks. On the other hand, twenty-nine (18%) of the students who took notes marked in the text where they stopped reading, the large majority of whom (20 students) were those who achieved zero or one point. In addition, there were also many note-takers who visibly changed their note-taking towards the end of their notes. Some students (20%) stopped taking notes for the terms found towards the end of the text, and some (6%) who took notes throughout their reading underlined information in the reading text only at the beginning of it. Many students, therefore, either did not manage to read the entire text, or took less thorough notes towards the end of their reading.

A comparison was done between the post-test scores of note-takers who marked in the text that they did not manage to read all of the text, and the note-takers who did not make any such marks. The result of comparison between the two groups shows that those who did not make any such marks learnt 41% of the terms they managed to read about, whereas the note-takers who did not finish their reading only learnt 30% of the terms they could find in the text marked as read. This suggests that perhaps those who read the entire text were not only faster readers, but also better learners.

Each of the five terms was learnt by 34-43% of the students. However, there was a difference between note-takers who wrote notes

for certain terms and those who did not. For the first two terms, both the students who took notes on the two terms, and those who did not, performed equally well on the questions about them. It was for the last three terms that there were big differences. Almost half of the note-takers who took notes (44%), but only 15% of those who did not take notes on the final three terms answered correctly. What this means is that at the beginning of the reading the students were probably very attentive to what they were reading, regardless of whether they wrote notes for those terms or not. Taking notes while learning terms at the beginning of the text therefore did not prove to be an effective strategy, as not taking notes proved to be just as effective. Towards the end of the reading, however, the note-takers who did not write notes for those terms were affected negatively. This, again, could be an effect of time. Some students marked in the text where they stopped reading because they ran out of time, so they were unable to learn all of the terms. Some other students who did not make a mark in the text perhaps instead stopped being attentive and taking notes when they started running out of time and, consequently, also did not learn all of the terms.

4.5 Strategies of successful and unsuccessful learners

In order to be able to compare the strategies of successful and unsuccessful learners, the students were grouped according to their knowledge test score. Students who scored zero or one were deemed to be unsuccessful learners on this multiple-choice test. Those who received two or three points were classed as intermediate learners, and those who achieved four or five successful learners.

There were some differences between the three groups of learners and the types of information they noted (Table 7).

The first difference is that on average the successful learners copied almost all terms in their notes (4.57), whereas the unsuccessful wrote fewer (3.78), and, consequently, learned fewer of them (see Section 4.4). Thus it seems that unsuccessful learners achieved low scores due to their low-quality reading/learning, and possibly also slow reading. Second, while the percentages of students noting definitions were similar (95-97%), unsuccessful learners noted this type of information for fewer terms. On average, they wrote definitions only for three terms out of five, whereas the successful learners wrote them for four. A higher percentage

of successful learners (86%) than unsuccessful learners (75%) also used examples. In addition, successful learners also used both a definition and an example slightly more often (*M*=1.29) than the intermediate and unsuccessful groups of learners. The group of intermediate learners was typically between the two groups, with a few exceptions. A noticeably smaller percentage of these students wrote examples and notes which touched on the characteristics of the entire group of three terms rather than one specific term. In short, all students usually chose to note only one type of information for each term, although this was especially true for the group of unsuccessful learners.

Table 7. Percentage of students from three learner groups using the given type of information, and the mean number of terms described using this type of information

		Points on the knowledge test		
		0-1	2-3	4-5
	n students	69	68	21
Terms written in the notes	average	3.78	4.24	4.57
Definitions	% students	96	97	95
	M n terms	*3.06*	*3.55*	*4.10*
Examples	% students	75	66	86
	M n terms	*2.10*	*2.22*	*2.06*
Term group characteristics	% students	25	22	29
	M n terms	*1.29*	*1.20*	*1.67*
Details	% students	13	16	19
	M n terms	*1.11*	*1.09*	*1.00*
General information on rhetoric	% students	14	7	10

There were some differences in the types of transformation strategies different groups of learners used (see Table 8).

Table 8. Percentage of students from three learner groups using the given transformation strategy

		Points on the knowledge test		
		0-1	2-3	4-5
	n students	69	68	21
% n using transformation strategy	Verbatim copying	96	100	100
	Close transformation	64	84	81
	Rephrasing	39	49	62
	Non-lexical additions	35	35	33
	Original ideas	25	16	24
	Translation	14	10	24

A higher percentage of successful learners than unsuccessful learners used close transformations, in particular abbreviations. More of them also used rephrasing and translation. The detailed data show that these differences are also reflected in the types of information noted. The successful learners used the higher-level strategies, such as rephrasing, for the least frequently recorded information types, general information on rhetoric, details, and term group characteristics. Writing about term group characteristics might thus make for deeper learning, which has been shown in other studies, where noting high-level ideas lead students to achieve better results on tests and to draw their own conclusions (Peverly et al. 2003). Similarly, successful learners were more likely to change and abbreviate examples and definitions than the less successful learners.

Interestingly, in some instances, the intermediate learners deviated from the position between the unsuccessful and successful learners here as well. As can be seen in Table 8, a smaller percentage than the unsuccessful and successful learners used a language other than English and noted their own original ideas. On the other hand, a slightly higher percentage of them used close transformation.

5. Discussion and conclusion

This study investigated note-taking strategies of Swedish students and how these affected their learning of English terms from reading. The strategies which were investigated included taking or not taking notes,

the type of information the students chose to note, language transformation strategies they chose the employ, and strategies for different vocabulary items. These different strategies were then also related to the students' test scores.

The first research question sought to explore the note-taking strategies of students who are learning L2 subject-specific terminology from reading. The analysis of notes focused on what the informants selected to write in their notes, and how they transformed that selected information into note format. The results show that most informants selected definitions and examples to help them learn the terminology. Fewer informants noted general information on rhetoric, details, and term group characteristics, which could be one of the reasons for the general low scores on the knowledge test, as macropropositions, such as term group characteristics in this study, have been shown to scaffold students' knowledge and help them retrieve lower propositions (Peverly et al. 2003). Few students also used the higher-level language transformation strategies such as rephrasing, translation and original ideas. Instead, many students relied on zero transformation (verbatim copying) and making slight changes to the language (non-lexical additions and close transformations). As using higher-level transformation strategies can contribute to understanding of the text (Howard, Serviss and Rodrigue 2010), and consequently also learning of the content, students' choice of transformation strategies may be thought to have contributed to the poor learning of terminology under time pressure as well.

The second research question explored whether students used different strategies for different terms. The nature of notes for different terms was affected by the position of the term in the reading text and probably by the language, complexity, and length of the term description. The position of the term in the text affected how many students wrote down terms and examples; fewer students noted terms and wrote examples for the terms at the end of the reading text than for those at the beginning. The position of the term, therefore, did not only affect the likelihood of the student writing notes on the term, but also the likelihood of the student writing examples. Language and complexity of the term description in the reading text also affected student strategies to some extent. Terms with longer and more complex descriptions were often described using several language transformation strategies, and

term descriptions with words more familiar to the students tended to be described with verbatim copies or close transformations. Students thus used different strategies for some of the terms, depending on the characteristics of the term description. To my knowledge, this type of interaction between text characteristics and note form has not been reported previously. The students, therefore, acted strategically and did not only perform routines. However, due to low scores, it is unclear how much these different strategies for different terms affected the learning of these terms.

The comparison of unsuccessful and successful learners (research question 3) produced findings which, as noted in Section 4.4, are not statistically significant but can be considered indicative of a trend. The findings suggest that certain strategies were used by more of the successful learners than the unsuccessful learners. First of all, successful learners tended to write notes on more of the terms than the unsuccessful learners, and their notes differed in quality as well. The notes of successful learners had more definitions and examples, and more of them also used the higher-level language transformation strategies such as rephrasing, translation and original ideas. Quantity of notes, such as the number of terms described in the notes and the number of definitions and examples, therefore, contributed to learning, which has been shown in other studies as well (e.g. Peverly et al. 2003, Song 2011). Quality of notes, such as transforming the language of the original text into your own, also appeared to contribute to learning, probably due to the students' higher engagement with the text.

The students who did not take notes on average achieved similar scores on the knowledge test as note-takers, which has not been the case in other note-taking studies (e.g. Peverly et al. 2003, Peverly and Sumowski 2012). As in some L2 reading research (e.g. Shaw and McMillion 2008), one major hindrance to students in this study achieving high scores appeared to be time. Timing affected whether students took notes on terms or not, so lower percentages of students took notes on terms which were further into the text. Non-note-takers did not mark that they were unable to read through the entirety of the text, whereas some note-takers did. A possible explanation for this could be that they did not manage to read the entire text because they were slowed down by note-taking. In this sense, high achieving students who did not take notes more correctly judged the task and, consequently, adopted a

more effective strategy for learning than the note-takers who were unable to finish reading the text, such as the group of unsuccessful learners where almost a third of them marked that they were unable to finish reading the text.

Time also affected the intermediate group of learners, who learnt two or three terms. In this group, only some students acknowledged that they were unable to finish reading the text, so they on average managed to take notes on more of the text that the unsuccessful learners. However, the strategies this group used did not always fit into the expected pattern. Some strategies were in fact used by a lower percentage of intermediate learners than unsuccessful learners. A lower percentage of intermediate learners wrote examples and used higher-level transformation strategies such as translations and original ideas. What this means is that the quality of the intermediate learners' notes was in some respects lower than those of the unsuccessful learners. Thus while unsuccessful learners took notes on fewer terms, they used some of the strategies which have been shown to contribute to learning more than the intermediate learners. In other words, the notes of unsuccessful learners were of higher quality, but lower quantity, whereas the notes of intermediate learners were of higher quantity, but lower quality. If the students consciously chose this strategy, perhaps this could be interpreted as intermediate learners attempting to read through more of the text and sacrificing some of the quality for quantity, which is something students expected to read in L2 may find themselves doing, given the limited amount of time they are willing to devote to study reading (Pecorari, Shaw, Malmström and Irvine 2011).

In conclusion, my findings show that, in this study culture, a large majority of students learning from reading take notes, even when they will not be keeping them. Note-taking can, therefore, be seen as not only a device for future reference, but also as a learning strategy. Student note-taking strategies are affected by several factors. First, the strategies the students use depend on the characteristics of the student: degree of engagement with the text, depth of understanding, and the student's assessment of the task. Second, the strategies are affected by the characteristics of the task and text: the time available for reading, and conceptual and linguistic complexity of the text. The results also confirm that the quantity and quality of student notes affect the success of learning subject-specific terminology in L2. Students who write more

complete notes with descriptions of more of the terms and their characteristics, especially the high-level ideas such as definitions, are more likely to learn the terms. Students who use note-taking strategies focusing on deeper engagement with the text, such as reformulating descriptions of terms into their own words, also remember more subject-specific terminology in L2. The different strategies students employ, however, are probably less affected by the characteristics of the different terms and more by how quickly the students are able to read.

The pedagogical implications following from this study are that content and LSP teachers should teach students note-taking strategies. However, it is important to highlight that reading and lectures are very different situations particularly in L2, and require different strategies and teacher advice. Teachers need to teach students how to adjust their note-taking and reading strategies to the reading/learning conditions, as well as their personal learning style. It is important that the students are aware of the trade-off between time and reading quality, so that they are able to make informed decisions about whether to take notes or not, as they may sometimes actually benefit from not taking notes. Teachers should also encourage their students to take the time to read through the entire text and to take extensive notes on all of the content they need to learn (e.g. Kiewra and Benton 1988, Peverly et al. 2003). They should especially focus on the advantages of noting the high-level ideas (Peverly et al. 2003), which are, as in this case, usually signaled by the structure of the text and topic sentences. Furthermore, as shown in this study, there is a tendency for notes to be limited to the areas covered by the text, with relatively few students using their notes to relate the topic of the reading to ideas and experiences that form part of their prior knowledge. Given the beneficial effects of making such connections (Stefanou, Hoffman and Vielee 2008), students should be encouraged to make them using their own words, as using their own words may contribute to their better understanding of the text (Howard, Serviss and Rodrigue 2010). Using their own words is likely to imply a greater use of L1, in contrast to much earlier note-taking advice. Students manifestly need training in note-taking strategies if they are to go beyond the text by making connections to pre-existing knowledge.

While this study has investigated several different kinds of note-taking strategies, there are others which have not been investigated, but which could provide valuable insight into note-taking and learning (e.g.

linear and non-linear note-taking, visual elements, etc.). In addition, it should be noted that generalisation of the results of this study can be made for this study culture, and that students in other educational environments might approach note-taking differently than the Swedish students in this study. Future research should thus focus on other note-taking strategies, and aim to investigate and compare note-taking strategies of students in various educational environments.

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Appendix 1

Rhetoric: How language works

It's long been known that the way we formulate our thoughts helps determine the likelihood that our words will change the way people think, feel and behave. The study of using language to influence goes back at least as far as the ancient Greeks and Romans, who valued rhetorical skills, and developed a set of terms to describe language use, and the forms and functions of language.

Many of these terms describe figures of speech which people recognize easily, even if they don't know the term itself. We've all heard jokes based on the idea that some phrases, like *military intelligence* or *political goodwill* are contradictions in terms, or descriptions of love as *sweet pain*. Such mutually contradictory terms are called **oxymoron**. In slang and in poetry we want to make our language a bit more poetic and one way is to call something by the name of one of its parts, like calling a car *wheels*, or a new person *a new face.* This is called **synecdoche**. Another device we use every day is **litotes**; this term refers to expressions like *not undesirable* for something excellent, or *not unattractive* for a beautiful object, that is referring to something as if it was less than it really is.

Some of the rhetorical figures have to do with how sentences, clauses and phrases are put together, and these can often be used to refer to the style of various writers. When clauses are assembled without conjunctions (words like 'and' or 'but'), that's called **asyndeton**, as in Churchill's famous speech that went *We shall fight on the landing grounds, we shall fight in the fields and in the streets, we shall fight in the hills; we shall never surrender*. On the other hand, when long strings of clauses are created with conjunctions, that's called **polysyndeton**. The writer Ernest Hemingway was fond of this, with sentences like *I said, 'Who killed him?' and he said 'I don't know who killed him, but he's dead all right,' and it was dark and there was water standing in the street and no lights and boats all up in the town and trees blown down*. Many writers create a concentrated style by using one verb working in several clauses of a sentence often with a different meaning, like *She broke his golf-club and his heart* or *He took a drink and a photograph.* This kind of concentration is called **prozeugma**.

Many rhetorical figures rely on repetition. For example, John F. Kennedy was famous for saying *Ask not what your country can do for you, ask what you can do for your country* and a folk expression says *You can take the boy out of the country, but you can't take the country out of the boy*. That figure of speech, involving presenting terms in one part of a sentence and reversing them with the same grammatical function in another, is called **antimetabole**. A similar device is using the same word several times in different grammatical forms, which is called **polyptoton**, like in Brad Pitt's line from *Fight Club: The things you own end up owning you* or the joke *Working hard or hardly working?* Another familiar device is repetition of a common name with different functions: once to designate an individual and once to signify the qualities that the individual usually has: *boys will be boys*, *war is war*. This is called **diaphora**.

Some rhetorical figures are not examples of effective speech, but rather the opposite. For example, some people are keen to show off their learning and pepper their speech with foreign words and phrases. When this results in an unattractive mix of too many languages (*There's a soupçon of the Zeitgeist in his charisma*), it's called **soraismus**. Another bad feature that we quite often see in writing is **catachresis**, the use of a word in a context that differs from its proper application, like using *sight unseen* for a recording one has not listened to or using *infer* when you mean *imply*. **Parrhesia** is being too directly or rudely insulting, which might not be wise, as in the classic "yo' mama" jokes: *Yo' mama so old I told her to act her age and she died* or *Yo' mama so old that when she was at school there was no history class.*

Other rhetorical terms refer for things that a piece of text does, the functions it performs. **Mempsis** is expressing complaint and seeking help, something some of us recognize from scam emails from people who are in trouble and need our help to rescue their money or like a politician who needs our help to mend broken Britain. When a speaker expresses happiness or gratitude for good luck—or for the avoidance of bad luck—that's called **paenismus**, as in *How wonderful everything has been today* or *Thank goodness it didn't rain on the day of the picnic*. If a speaker expresses consolation and encouragement, saying things like *We're all with you and it's sure to get better* or *Tomorrow is another day* the term is **paramythia**. It may seem strange to give formal names to these ordinary functions of speech, but the ancient Greeks were, and

modern rhetoricians are, very keen to help us see through what politicians, or scam email writers, are doing to manipulate us.

Sources: Wikipedia and Silva Rhetoricae (http://rhetoric.byu.edu/)

Motivating English language study among Master's students: The case for summary writing

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Abstract

The internationalisation of university studies has resulted in an increasing use of English, a language which many students assume they master sufficiently well. This can lead to resistance to devoting time to language improvement.

The motivation to work with language skills can be promoted by integrating language classes into discipline specific summary writing. This approach is showing some potential and incorporates reading skills with writing, grammar, peer critique and discussion. Summary writing also facilitates a critical study of different texts and their structure.

1. Introduction

Globalisation and increasing mobility have led to a sharp rise in the number of university courses and programmes given in English, (Airey 2004, 2006; Björkman 2008, Bolton and Kuteeva 2012, Coleman 2006, Haastrup 2008, Mauranen 2006, Milani 2007, Shaw and Dahl 2008, Söderlundh, 2010), not least in Sweden where the majority of courses at Master's level are now taught in English. One of the underlying reasons for this development is the Bologna Declaration (1999) which has facilitated the movement of students between universities within the European Union in order to encourage cultural and academic exchange. One of the most salient outcomes of this exchange is that English has become the lingua franca of the universities.This is in part due to the fact that English has become the overwhelmingly dominant language of business and entertainment, but also to the fact that academic success is measured by the number of citations in international journals where English predominates (Jensen and Thøgersen 2011, Lillis and Curry, 2010). This has given rise to a number of problems of both a practical and a political level (Kuteeva 2011, Roberts 2008, Voss 2012).

Master's students coming to the Scandinavian countries expect tuition in English, and as they have been admitted, assume that their language skills are sufficient for the purpose. While for an undergraduate student, with even a relatively low level of competence in English, a semester in Sweden can be extremely beneficial, contribute to their

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cultural understanding and even improve their skills in communicating in English, for a student who plans to follow higher level studies, the situation is quite different.

Among the language demands facing Master's students is the ability to navigate their way through large quantities of literature and from this, to extract the wheat from the chaff (Shih 1992). They must also be able to follow lectures given by people with a wide variety of non-native accents and be able to follow and contribute to discussions in seminars. Although direct contact in such situations allows for some element of repair and immediate clarification, written texts are more problematic and students must be able to write reports and papers which are clear and unambiguous. Master's theses are public documents. This increases their need to be clear and without many basic grammatical errors, as these have a tendency to undermine the reliability and authority of a communication (Bourdieu 1977). Furthermore, student texts should follow the most important conventions of the field and genre in which they are sited. Yet another demand that faces many students is the phenomenon of the "opposition" which requires making a public or semi-public presentation, and critically reviewing and commenting upon the work of a fellow student; this is an aspect of academic life unfamiliar to many students.

These are tough demands, even for a native language speaker, and for a master's student with perhaps a minimum level in an internationally recognized language test, can be almost insurmountable. However, many master's students assume that their language skills are adequate for the purpose and do not anticipate the need to develop them.

This paper is based on the study of a possible method for encouraging and helping students to improve their language skills that was trialed in two short courses given to two different groups of master's students at a Swedish University. The students were all following International Master's programmes at the Faculty of Science and Technology. Moreover, in line with the findings of Lea and Street (2006), one of the aims stipulated by the Faculty was to provide students with instruction in referencing and avoiding plagiarism, an issue which has become increasingly in focus (Barry 2006, Pecorari 2003). In order to achieve these aims, a course was developed which built on students writing summaries of research articles in their field. This learner-centred approach to academic skills would not only give students a chance to

produce texts in English but would also be a means to introduce them to the specific discourse community of their discipline (Gustafsson 2011, Lea 2004). Further, the texts produced could be relevant and useful to their studies. One objective of the trial was to investigate the extent to which summary writing did in fact help students to improve their English writing skills and raise this to a level that was considered more academically acceptable. A second objective was to discover whether students themselves felt that working with summaries was a valuable and interesting exercise.

After the courses had ended, the students were given the opportunity to provide feedback.

The questions that the trials aimed to address are:

1) How can non-native speakers of English be best prepared to meet the demands required by studying for Master's Degree through the medium of English in a non-English environment?
2) How can we motivate students to work towards fulfilling these demands and expectations?

2. The problem of motivation

The question of motivation is highly complex and in the context of language learning, has been addressed by a number of scholars, including Cook 2001, Crookes and Schmidt 1991, Dickinson 1995, Henry 2010, 2012, and Ushioda 1998. According to Zoltán Dörnyei, the only consensus among researchers is that it concerns "the *direction* and *magnitude* of human behaviour" (2001a:8). He has defined motivation as "the dynamically changing cumulative arousal in a person that initiates, directs, coordinates, amplifies, terminates, and evaluates the cognitive and motor processes whereby initial wishes and desires are selected, prioritised, operationalised and (successfully or unsuccessfully) acted out" (ibid:9).

One of the central issues concerning the use of English in higher education is that for most students, English is simply the medium of study, particularly when the national language is not English. This instrumental motivation is a weaker motivating force than integrative motivation (Henry 2010). The importance of attitude to motivation is well known and documented (e.g. Gardner 1972, Guilloteaux and

Dörnyei 2008) and a number of theories try to account for this. The problem is therefore how to motivate master's students to improve their communicative competence and to develop their language skills.

Another important issue is that L2 identity construction often threatens a learner's self-image (Dörnyei 2001b, Dörnyei and Ushioda 2009). It is therefore important that language work should be organised in a way which is not face-threatening and which students can experience as a useful and legitimate element of the studies in which they are directly engaged. Success and a positive sense of self are important for motivation, and therefore it might be assumed that is particularly difficult for learners, whose language skills have not previously been questioned, to not only accept criticism, but also to accept the seeming deterioration in their performance that conscious efforts to improve language skills often appear to entail (Tarone and Yule 1989:147-148). Further, lack of success often leads to "amotivation" or "demotivation" (Sakui and Cowie 2011) and can thus result in a negative spiral of behaviour. As Walter Ong (2002:402) has commented, language is all-encompassing and "seems to touch everything else in you". To find fault with a person's language can be likened with finding fault with that person. Norton & McKinney (2011:78) have pointed out that "[l]anguage is the place where … our sense of selves, our subjectivity, is constructed." This is a stance which for example Dörnyei (2001b:66) endorses.

Following Markus and Nurius' (1986) concept of "possible selves", it is therefore important to promote the idea of an academic L2 self among students in order to endow language study with a more positive label and to support and nurture student motivation. To this end, Swales (1990:75) has posited that activities that are "goal-directed" are most likely to be successful. Students should be shown that they need to belong to the discourse community of their discipline and encouraged to strive towards the goal of learning and conforming to the norms that this community shares (ibid: 23-27). As I have previously suggested, in the case of students following an English medium university education in Sweden, the motivation to work with language is probably instrumental or pragmatic, or using the terminology of Dörnyei and Ottó (1998), is "executive". These issues imply that some sensitivity in the way in which students are encouraged to develop an academic self is required.

To encourage students to devote time and energy to improving their English will best be promoted by a purposeful activity which can be seen

to have a direct connection to their main field of interest. Horowitz (1986:446) has insisted upon the importance of the "demands of the writer's environment" and summary writing can help students to understand and learn to adapt to these demands. In other words, student motivation could be strengthened by using language study as a vehicle for investigating the texts and praxis of their own field of interest and by relating language work to a pragmatic study of their particular academic environment.

3. Summary writing

Summarizing skills are essential in an academic setting (Kirkland and Saunders 1991, Yang and Shi 2003) and writing summaries based on discipline-related articles and texts is a promising candidate for promoting self-regulated motivation (Wolters 1998) for language skills' development. Using texts with which students are expected to be familiar will also reduce the issue of "interference", or changing focus, and reduce the sense of an activity switch which can lead to a motivational switch (Dörnyei and Otto 1998).

The multiplicity of skills involved in summary writing can constitute a very useful occasioner for "languaging[1]". Further, summarizing texts from the relevant field aids vocabulary development, increases genre and language awareness, and also introduces the disciplinary learning and academic literacies required for success (Bondi 2010, Lea 2004, Lea and Street 2006, Gustafsson 2011, Samraj 2008), thereby providing a gateway to the discourse community which the student hopes to join.

3.1 Reading

As Horowitz (1986:446) has pointed out, students must be introduced into the "interpretive community" of their discipline and reading is one way of bringing about this acculturation. The reading techniques required for summarizing include first skimming for gist and then a closer reading to extract the essentials and to ensure comprehension (Chen and Su, 2012). Such a study also provides insight into the way in which the text

[1] "Languaging" is a term derived from Vygotskyan sociocultural theory and encompasses the notion of communication in a very wide sense.

is built up and can raise the awareness of style and genre, or of what Hyland (2002:117) terms the "communities in which texts will be used and judged".

Reading and understanding academic texts is a complex process (Meijer et al 2006, Negris 2013) and one with which students often require support (Shih 1986). Tarone and Yule (1989:44-45) refer to studies which indicate that it is often the `higher-level´ skills such as evaluating, selecting and synthesizing information that university students lack, and working with summaries is also a means towards redressing this deficiency (Kirkland and Saunders, 1991). Not only does the academic world involve a great deal of reading, but it has been shown that L2 reading is usually slower than L1 (Shaw and McMillion 2008, 2011). Among the reasons that have been suggested to explain this phenomenon are background knowledge, and the depth as well as the size of vocabulary knowledge (Hellekjaer 2009, Jackson 2004, Qian 2002). Extensive reading has been suggested as a remedy, and particularly in the case of L2 reading, can lead to "incidental language learning" (Pecorari et al 2011). Moreover, the lexis typical of the field as well as terms commonly found in academic writing in general can be noted, discussed and acquired in this way.

Thus, studying a text that is relevant to the field of study and that ideally, is prescribed literature, can constitute a meaningful and constructive activity which has a direct connection to the student's immediate, perceived need. It can also be a stepping stone towards improved linguistic competence as well as to higher-level communication skills in general.

3.2 Speaking and listening

Academic discussion is an area that has until recently, has received only limited attention (Björkman 2008, 2011), and is comparatively demanding (Mauranen 2006). The content-based approach (Shih 1986, Snow and Brinton 1988) that summary writing affords encourages activities with a focus on relevant content rather linguistic form, and provides a relatively interesting and unthreatening means for students to develop their speaking and listening skills. Moreover, the relevance and familiarity of the topic should facilitate a genuine exchange of ideas and viewpoints; something which increases the motivation to communicate

(Dörnyei, 2001a, 2001b). In addition, as subject knowledge is seen to be as important as language competence, students who are perhaps weaker linguistically will have the opportunity to contribute to the content of the discussion, thereby strengthening their sense of an academic self while practicing and improving their language skills.

Crawford Camiciottoli (2010) has pointed out that many Erasmus students have little experience of listening to English, which can cause problems for example in lectures, while Airey (2006, 2010) confirms that even Swedish students experience difficulties in this context. Talking about the texts can help students to develop the pragmatic strategies that are necessary for achieving communicative effectiveness (Björkman 2011), encourage fluency and lead to a better understanding and "judgment about the `disciplinary´ of what is said" (Airey 2010:35).

Using texts in this way, students not only act as mutual resources for subject learning (Dörnyei and Malderez 1997, Oxford 1997), but by repeating and imitating the frequently recurring words and patterns in the text, can add them to their own language resources and thereby make them available for further use and modification (Larsen-Freeman 2011:48, Pecorari 2008b). The texts provide a means for peer scaffolding of both language and subject understanding.

3.3 Writing

A summary is a condensed, objective account of the main points of a longer text and has a number of advantages from a learning point of view. One is that it forces students to concentrate on the essentials and to say what is to be said both as concisely and correctly as possible. While the language and content of the student text have the advantage of being drawn from the input material, summarizing requires a reformulation. Thus, summary writing helps students to learn to paraphrase and thereby avoid the plagiarism that often results from a lack of the language skills that are necessary to reformulate often complex ideas in their own words (Barry 2006, Lea and Street 2006, Magyar 2012, Ostler 1980, Pecorari 2003, 2006, 2008a). Moreover, a summary provides an opportunity to work with discipline-specific lexical bundles (Bondi 2010, Pecorari 2008b).

The relative brevity of the student texts can allow teachers to give personalized, individual feedback and for students to re-work their texts.

Ideally, from such feedback, students should be able to identify their own strengths and weaknesses and work to see a steady and positive progress in their writing skills as they move over new competence thresholds. Facilitating and encouraging positive retrospective self-evaluation allows and enables learners to take control of their learning and is conducive to motivation.

Moreover, from the perspective of scaffolding, summaries can profitably be written in small groups or pairs, allowing students to benefit from the strengths of their peers.

3.4 Peer review

As Hyland (2009:30) has pointed out, writing is a form of social interaction and the peer seminar, which is a form and development of group interaction, (Aguilar 2004) can be a very rewarding exercise. However, as the peer seminar is an independent genre (Swales 1990, Weissberg 1993) in order for peer review to be useful and constructive, students need training in peer response and in peer editing (Hyland 2003). Adriana Bolívar (2011) has described this activity as the interface between grammar and pragmatics. By this, she means that it provides a resource for learning appropriate linguistic ways to discuss alternative viewpoints and to politely disagree. Peer review is therefore not only a tool for languaging, but also provides and facilitates practical training in giving and receiving criticism and in using language which is appropriate to what can easily become a face-threatening situation Students do not only need to know what to look for, but also how to give praise as well as constructive negative feedback. As Kasper and Schmidt (1996) have commented: “mere exposure is insufficient for L2 pragmatic development and therefore instruction is necessary to raise learners’ consciousness of form-function mappings and pertinent contextual variables…” Therefore teacher guidance and involvement is necessary to show students how to give criticism in a positive and friendly way and ensure that feedback is constructive and fulfills the intended purpose.

Moreover, as peer review requires students to analyse each other’s work for content, structure and comprehensibility, it can be constructively used as a tool for improving reader awareness, and subsequently the structure and cohesion of a text. In other words, it provides a basis for collaborative learning, cooperative learning and

interaction to support the development of communication and enhance learning outcomes in the classroom (Oxford 1997). A group can become a resource pool, the sum of which is greater than the individual parts (Dörnyei and Malderez 1997:67).

4. The trials

In the autumn of 2010, we were given the opportunity to test these theoretical benefits of summary writing in two courses, or language modules, ordered by the Faculty of Science and Technology. The students taking part in these trials had all been admitted to International Master's programmes in science and technology. Having fulfilled the formal language requirements for admission, the assumption had been that their English was adequate. However, it had become evident that this was not necessarily so and that many needed remedial help.

Attendance and the completion of assignments were mandatory, but credits could not be directly awarded for the language modules which were integrated into existing compulsory courses. The first year module was added to an introductory course three-credit course which included library skills, while for the second year students, it was incorporated into the master's thesis requirements.

4.1 Method

Two separate language modules were organized, the first for students writing their thesis the following semester and the second for students beginning their master's studies. For the first group, the course was required to have direct relevance to the work of writing and defending a master's thesis while for the latter, it was stipulated that the materials used should have direct relevance to their different programmes. A further requirement was that all students should be given guidance in how to avoid plagiarism and practice in referencing, citing and paraphrasing (Barry 2006, Pecorari 2003, 2006).

4.2 The first trial

The first group trial was allocated 24 hours' tuition spread over the autumn semester. The course comprised two lectures for the whole group

of about 220 students from all the different engineering programmes offered, followed by ten two-hour classes. All the students were international students and the majority came from countries outside Europe.

The course plan included the writing of two or three summaries, the first of which was to be written in pairs, followed by peer reviews in class. Presentation techniques and peer review were integrated into the course plan. The final assignment was a short report from their field which was to be formally presented in class and be opposed by two other students, following the typical format of the master's thesis defense. The assignment should not involve extra unnecessary study, and thus students were encouraged to write about a subject they were considering for their thesis or to present a term-paper. They were not required or expected to have a complete paper, but needed an overview and some sections. Prior to the first summary, students worked with a typical research article in their field and the teacher led discussions to try to pin-point the salient features of the article design, (Swales 1990) and the main points of the actual text.

After each summary assignment, students were asked to review each other's work for content, structure and obvious language errors. They were instructed to begin with positive feedback and then move on to suggesting and discussing aspects that could be improved. Each summary also received teacher feedback and students were encouraged to re-write the summaries after this. Some traditional language teaching, including vocabulary building, cohesion and modality, was incorporated into the classes.

4.3 The second trial

The second group comprised about 90 students, the majority of whom were new to the university, but included a few second year students who had arrived at the university too late to follow the introductory course in their first year, or who had missed part of that course. These students either took both the language modules. Fourteen Swedish L1 speakers also participated. These were all female and followed the same programme, together with one male international student. As Bolton and Kuteeva (2012) have pointed out, Swedes traditionally pride themselves on their language competence and it was decided that these students

would constitute a class of their own to minimize protests. The students following the other programmes were predominantly male and were divided into four classes of between 15 and 20 participants, coming generally from two disciplines.

This module also began with two introductory lectures to the whole group. The stipulations were that each student should write a summary of a research article in their field, and in pairs, a critical reflection built upon that article and two papers that they themselves had found in their library class. The premise was that a subject teacher would participate in the final session and give content feedback on the critical reflection. This time, the students were only allocated one session for summary writing and one for the critical reflection. Lessons took place every second or third week during the semester and included three forty-five minute slots for feedback sessions and peer review discussion. A further feedback session was given for students whose assignments had not reached a level that was deemed good enough. Students were required to repeat the assignments until they were "good enough".

On the completion of this module, students were given the opportunity to answer a questionnaire. The questions addressed the importance of English and how useful they felt that the different assignments had been to developing their language skills. Particular emphasis was given to the potential benefits of summarizing research articles.

4.4 The questionnaire

The questionnaire had five questions, two about English generally, one directly concerned with summary writing and a fourth question asked for free comments about the course. The final question concerned the critical essay and will not be discussed here. Just over one third of the students, 35 individuals, responded.

> Question One:
> How important do you think that English is for your:
> a) studies,
> b) career prospects?

Students were asked to rank the importance from 1 to 5 with 1 as most important. Almost all the students who answered said that English was

very important and awarded both categories 1 or 2. The distribution between studies and career was even. Only one student gave the importance of English a 3 and he did this for both categories.

Question Two:
What aspects of English do you need most help with?

Table 1. Question 2: What aspects of English do you need most help with?

Order of importance	**1**	**2**	**3**	**4**
Reading academic texts	4	4	12	10
Listening to lectures	2	7	8	14
Speaking (discussions, presentations)	15	8	6	2
Writing	14	11	4	3

The figures in the boxes represent the number of students.

Question Three was specifically related to different aspects of summary writing and read:

How useful have you found summary writing for:
a) general writing practice
b) a guideline to what aspects of English you need to work with,
c) reading academic texts to extract the essentials,
d) understanding how texts are constructed?

Again, respondents were asked to rank the different aspects and were asked to add any information that they found relevant.

Table 2. Question 3: How useful have you found summary writing for:

Ranking in order of importance	**1**	**2**	**3**	**4**	**5**
general writing practice	4	7	5	8	5
a guideline to what aspects of English you need to work with	3	4	11	5	6
reading academic texts to extract the essentials	5	2	9	7	7
understanding how texts are constructed	6	2	6	11	5

The figures in the boxes represent the number of students.

The fourth question that will be considered here concerned recommendations for future courses and received few responses. These will be incorporated into the findings of the questionnaire.

4.5 The findings

Although the questionnaires were anonymous, the organization of the classes meant that it was possible to see which had been filled in by Swedish students. Although they endorsed the view that English was important, the general attitude was that they did not need a course. One commented: "I find it abit unnecessary for Swedes to take the course many already are good." Another Swedish respondent wanted a test to precede the course and wrote: "If you fail you have to take the course, if you pass its vollantarely". This student agreed that English was going to be very important and placed writing and reading at the top of the list of areas that needed help, but then commented on summary writing "Already did it lots of times." This was one of the few comments that specifically addressed summary writing, although another Swedish student claimed that it was "already covered by other courses in the programme" and a third commented "I feel that I already have a good grasp of the points mentioned above."

It was not possible to identify the international students, but a couple agreed with the Swedes that the course should not be mandatory. One commented, "I would like professor with better English during the class of the other courses" and suggested that the course should not be mandatory for students but, "Should instead be compulsory for some international professors because they speak and write a very bad English!" These comments underline the points made by for example by Haastrup (2008) who points out that lecturers are expected not only to be experts in their subject, but also to master all the complexities of English, a finding that is confirmed by Pecorari et al (2011). As Airey (2011), Shaw and Dahl (2008), and Thøgersen and Airey (2011) comment, it is simply assumed that lecturers are to be able to teach in English and that they are happy to do so. However, a number of students felt that it was unfair that they should follow a course to improve their level of English while in their view, not all of their lecturers had a good command of the language.

In general, the international students were much more positive to the English module and to summary writing than their Swedish counterparts. Among their comments was as request for "More writing practice! I think with this kind of practice, students can improve their writing which would be helpful in their studies." Two comments of particular interest from the international students were the following: "Maybe it would be

possible to have topics that are not scientific but of common knowledge. This way it would be possible to focus on writing and organizing text and not about intellectual, academic, scientific work" while another student wrote: "We should have more basic reading and writing practice." Yet another respondent said that "It helps you to gain more confidence in writing when someone corrects your mistakes and gives reviews."

The results of the questionnaire show a consensus that English is important for both studies and a future career. Although the questionnaires were not always completed in accordance with the instructions, it was apparent that most students felt that they most needed help to participate in discussions and to write. Surprisingly, about half of the Swedish students claimed that they needed most help with speaking and one student said that the areas in which she needed most help were speaking and listening to lectures. This is line with the findings made by Airey (2009) and Hellekjaer (2010), for example.

The generally negative attitude of the Swedish students might confirm Airey's suggestion (2004) that Swedish students tend to overestimate their abilities, a view Hellekjaer (2009), supports for the Norwegian context.

5. Discussion

Students following a master's programme through the medium of English must be able to follow lectures (Airey 2009, Crawford Camiciottoli 2010, Heelkjaer 2010), read and analyse complicated texts (Hellekjaer 2009, Jackson 2004, Meijer et al 2006, Shaw and McMillion 2008, 2011) synthesize their ideas in writing (Lea 2004, Lea and Street 1998) discuss their findings and motivate their opinions (Björkman 2008, 2010, 2011, Bolívar 2011).There is no simple solution and no magic wand. The challenges facing each student are unique. Italian students, for example, are unused to writing (Crawford Camiciottoli 2010).

The purpose of this investigation was to ascertain whether summary writing was a potential candidate for enhancing students' language skills. However, a number of factors need to be taken into consideration when interpreting the results of the questionnaire. The first is that the students had not elected to follow the course and that they had not anticipated that they would have to study English. This in turn implies that their

motivation was low and that the sudden requirement impacted negatively upon their L2 identities and sense of self (Norton and McKinney 2011). Another is that the considerable workload involved did not generate any credits and was seen by many simply as an unexpected burden. Further, no other faculty members joined the final session or commented on the content of the critical essays. The students had put a great deal of effort into this extremely cognitively challenging and time consuming task expecting content feedback, and absence of tutor response may have impacted on the results of the questionnaires which were answered at the end of the last class. Furthermore, timetabling did nothing to suggest that English was important. Other issues that need to be considered when evaluating these results are that one group did not receive the questionnaire due to an administrative error, and that the Swedish students are over-represented as 10 of the 35 questionnaires collected came from this group. These students were generally very negative to the idea of having to study English.

Thus, taking into account the far from optimal circumstances under which the classes reported in the trials were conducted, the results of the questionnaire and the reports and observations from the different classes in both the language modules are carefully optimistic, and indicate that students could appreciate and benefit from language instruction organized around summary writing and peer review. Dudley-Evans and St John (1998:40) have discussed the impact of delayed needs and immediate needs upon motivation. The needs of the first year students are delayed, while for those in the second year, they are much more immediate. Unfortunately, it proved unrealistic to ask these students to answer a questionnaire, and so the results of the summary writing practice and of the course in general could only be deduced through observation and discussion.

Although there is no written documentation to support this view, these students in general seemed to respond rather more positively to the introduction of an English language module. Those students who were able to attend class regularly did show an improved ability to select the main points of the text and were beginning to learn to paraphrase. They were also more aware of the importance of structure and basic grammatical accuracy and were working towards improving this. Two even reported that one of the research articles that they had been given to

work with was so interesting that they planned to use it as a starting point for their master's thesis.

In both cases, the time allocated for language work was too little to allow for reasonable process and could only promote awareness of the needs. Language development requires an investment in time as well as in effort.

Dörnyei (2001b:27) has asked whose responsibility it is to motivate students and to help them maintain their interest, and while it is perhaps reasonable to assume that each individual student is personally responsible to work and strive towards better competence, it is also the job of a teacher to stimulate interest and to provide students with the means to achieve these ends. In the case of English, many students assume that their skills are satisfactory and find it difficult to accept that the competence that they have to interact, both in person and through the different social media, is not sufficient or acceptable for academic studies. It is therefore not surprising that they should display some resistance to devoting time and energy to improving the language skills which they had assumed were adequate. It is also a challenge to convince Swedish students who, in many cases consider themselves to be bi-lingual (Airey 2004) that they need to develop and improve their English.

6. Conclusion

6.1 Some advantages of summary writing

Because of the immediate relevance of the texts that are summarized to a student's field of academic interest, this practice can provide and help to sustain the motivation that is necessary for a language "knower" to cross competence thresholds. It is also an excellent source of feedback and can confirm that a student has understood a text correctly. Moreover, a selection of well-written summaries of articles in the field provides the writer with excellent material for both revision and research.

As Horowitz (1986: 456) has insisted, students must be able to encode selected data into appropriate academic English. Summary writing is potentially an excellent candidate to help them to accomplish this. Although I am by no means suggesting that the writing of discipline-related summaries is a panacea, I do propose that it is a potential stepping stone towards the goal of motivating students to take

charge of their own linguistic and academic development and to help them to become viable members of their chosen discourse community.

6.2 A question of attitude

However, although summary writing can be a useful tool in the work of increasing English language competence among students and in promoting motivation, there are a number of practical problems that need to be addressed (Voss, 2012).

The first of these is the Cinderella Syndrome with which English language classes are often afflicted (Dudley-Evans and St John, 1998:38). It is not only the students themselves who do not always understand the necessity of working with their language, but more importantly, even the university authorities who should be promoting and encouraging this development do not always seem to be fully aware of the complexity of the issue and of how time consuming language progress is. Student unwillingness to devote time to language is often shared by the unwillingness of faculty to allocate time to this end. When the importance of English language study seems to be rather a matter of lip service than of conviction, busy students give it low priority. When faculty is not seen to promote the importance of language, this has a negative effect on students' motivation (Dörnyei, 2001a:180).

Although integrating language classes with the discipline can alleviate the problem of motivation, it requires the complete cooperation and support of the faculty. Language must be given more status. The subject teacher and the language teacher must be seen to be working together towards the same goal and to be partners in the enterprise. The language specialist should not appear to be an appendage but an integral part of the whole. Ideally, the subject teacher should also appear in the language class if only for a few minutes, and join in group discussions (Gustafsson, 2011: 115). This not only demonstrates that English is important, but can also help to ensure that texts have been correctly understood and interpreted. In other words, collaboration between the language teacher and the subject specialist are central to boosting student motivation to improve linguistic competence.

Ong (2002:396) has raised another central issue, pointing out that "[u]nfortunately, even in the best colleges and universities, good writing is not demanded by everyone on the faculty". This is a serious problem

and one which it is extremely difficult to address. Lecturers cannot be assumed to have either the dual competence or the time required to address the language problems of student papers.

We are expected to encourage our students to "learn for life". It is the duty of teachers to empower students and to help them not only to have something to say, but, following Bourdieu (1977) say it in such a way that they will be believed and respected. Summary writing is potentially a means to motivate this struggle for empowerment and is worth further investigation.

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Lexical bundles in three oral corpora of university students

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Abstract

On the basis of previous lexical bundle studies, this paper examines the forms, structures and functions of 4-word bundles in three corpora of spoken English, one of them of native speakers of English and the remaining two of non-native speakers of English, corresponding to university students in their first year of an English Studies degree and to the same students after two years of university instruction. The study focuses on three major characteristics: the overall distribution of bundles, their typical structures and their functions. The findings show significant differences in the types of lexical bundles used by native and non-native students, as well as in their structure and function.

Our results support the idea that lexical bundles are important components in oral discourse. One of the pedagogical implications of this paper is that Spanish students should be exposed to more samples of spoken language.

1. Introduction

For years linguists have been interested in the study of frequent word combinations. "Phraseology" (Granger & Meunier 2008; Meunier & Granger 2007) and "formulaic sequences/language" (Schmitt 2004; Wray 2000, 2008) are two terms often used to refer to various types of multi-word units. In recent years, an increasing number of studies have made use of corpus data to add weight to the importance of multi-word units in language.

Recurrent word combinations, clusters, phrasicon, n-grams, or lexical bundles refer to word sequences frequently used and retrieved by means of a corpus-driven approach considering criteria of frequency and distribution across the corpus. A lexical bundle is a recurring sequence of three or more words that appears frequently in natural discourse, either oral or written (Biber et al., 1999). These chunks are fundamental parts of discourse whose research is becoming very important in EAP. Cortes (2004) and Hyland (2008b) have studied lexical bundles associated with disciplinary variation, and Biber, Conrad and Cortes (2004) have explored the role of lexical bundles in university teaching and textbooks.

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In a series of lexical bundle studies conducted by Biber and colleagues (Biber & Barbieri 2007; Biber & Conrad 1999; Biber, Conrad & Cortes 2003, 2004; Biber, Johansson, Leech, Conrad & Finegan 1999), it was found that conversation and academic prose present distinctive distribution patterns of lexical bundles. For example, most bundles in conversation are clausal, whereas in academic prose they are mainly phrasal. Much of the research published on lexical bundles has been carried out on written English texts. Comparatively, spoken English has not received sufficient attention so far. Biber et al. (2004) carried out a study on lexical bundles in classroom teaching and discussed the implications of their study for the theoretical status of lexical bundles.

This paper adopts an automated frequency-driven approach to identify frequently used word combinations (lexical bundles) in conversation. The study has been carried out on two spoken corpora of English of university students from the University of Murcia (Spain) and consequently compared with another corpus of spoken English collected at the Manchester Metropolitan University. The aim of this paper is to identify and analyse 4-word lexical bundles in the three oral corpora, applying a corpus-driven approach.

2. Background and state of the matter

As previously shown, a lexical bundle is a recurring sequence of three or more words that appears frequently in natural discourse, either oral or written (Biber et al. 1999). Research on these chunks as fundamental parts of discourse is becoming very important in EAP (Altenberg, 1987, Altenberg and Eeg-Olofsson, 1990, Butler, 1997, Biber and Tracy-Ventura, 2007). Lexical bundles associated with disciplinary variation have been studied by Cortes (2004), Hyland (2008b) and author (forthcoming). Biber, Conrad and Cortes (2004) have explored the role of lexical bundles in university teaching and textbooks.

To date, only a few studies have focused on lexical bundles in conversation. De Cock (1998) analysed highly recurring word combinations (HRWCs) in a corpus of spontaneous speak with native speakers and advanced learners of English. McCarthy and Carter (2004) researched multi-word strings in a large corpus of conversational English to identify the most common pragmatically integrated clusters. They discussed their functions and concluded that many clusters are more

frequent than single words accepted as belonging to the core vocabulary of English. Biber, Conrad and Cortes (2004) compared the lexical bundles in classroom teaching and textbooks to those found in their previous research on conversation and academic prose, stating that lexical bundles serve as discourse framing devices. Nesi and Basturkmen (2006) focused on the cohesive role of lexical bundles in a corpus of 160 university lectures and reported that the majority of frequently occurring bundles were found to be used to signal discourse relations. Biber and Barbieri (2007) investigated the use of lexical bundles in a wide range of spoken and written university registers, and concluded that lexical bundles are very common in written discourse management in contrast to previous research which showed bundles as being much more common in speech than in writing. Furthermore, Tracy-Ventura, Cortes and Biber (2007) analysed lexical bundles in Spanish speech and writing, and concluded that although lexical bundles are more common in spoken registers than written registers in English, there is a much larger set of lexical bundles used in Spanish academic prose than in spoken interviews. Kim (2009) examined lexical bundles in a large corpus of Korean texts consisting of academic prose and conversation, stating their importance as building blocks in discourse. Csomay and Cortes (2010) investigated the relationship between the discourse functions of lexical bundles found in classroom teaching and their position and showed the existence of a strong relationship between intratextual linguistic variation and the corresponding shift in discourse. Ädel and Erman (2012) have investigated the use of lexical bundles in academic writing by native and non-native speakers, reporting that non-native speakers exhibit a more restricted repertoire of recurrent word combinations than native speakers do.

So far, however, lexical bundles have never been studied in conversation, taking into consideration oral corpora compiled with university students. De Cock (1990) carried out a study similar to ours from a methodological point of view but she focused on the methodology of the study rather than on the results.

3. Research objectives

The main objective of this study is to identify and analyse lexical bundles in conversation across three different corpora of students at university

level, so that the findings of this work can be a starting point for establishing their pedagogical implications. I aim to answer the following research questions:

1) What are the most frequent 4-word lexical bundles in conversation in the three corpora involved?
2) Are there important differences from the point of view of their structure between the 4-word lexical bundles used in corpora of native English speakers and Spanish students studying an English degree?
3) What are the functions of the bundles in the three corpora?
4) What are the pedagogical implications of these findings?

Our final goal is to highlight the importance of exposing students of foreign languages to real samples of spoken language.

4. Methodology

4.1 Corpora used for this study

The present study is based on three oral corpora compiled between 2005 and 2007. Our learner data (C1) was collected during 2005 (N= 59, average age = 19.6). The average number of years that these learners had spent studying English before starting university was 8.8. Almost half of the informants had travelled to English-speaking countries, 45.8% spending an average of 1.9 months abroad. All of them (9 male/19 female) were enrolled in the English Studies degree offered by the University of Murcia. The corpus of English speaker language (C2) was compiled using the same structure at the Manchester Metropolitan University, UK[1]. The number of informants (12 male/16 female) in C2 was 28, all of them native speakers of English (average age = 22.25). This corpus was collected in 2006. Corpus 3 (C3) was collected using the same structure as C1 and C2 at Murcia University during 2007 (N= 18, average age = 21.6). The 18 informants (5 male/13 female) were some of the students who had started their degree in 2005 and had been

[1] Further details can be found at http://cecl.fltr.ucl.ac.be/CeclProjects/Lindsei/lindsei.htm#data

interviewed for corpus 1, now repeating the exercise after having completed two years of their English Studies degree.

4.2 Data

Native speakers of English led the interviews for all three corpora. The interviews followed the OPI format of the *Louvain International Database of Spoken English Interlanguage* (LINDSEI) corpus and were divided into three parts. First, speakers were given three topics to choose from: an experience that has taught them an important lesson, a country that has impressed them or a film or play which they particularly enjoyed or disliked. This was the personal narrative component of the interview. A small part of the interview was then devoted to interpersonal communication. Finally, students were given four pictures which told a story and were asked to describe them and offer an account of what was going on. This was the picture description component of the interview.

For this study, and in order to have samples somewhat comparable, we selected 28 interviews[2] from the 59 we had in C1 and made a new C1 with the same number of interviews as C2 in order to maintain an equal number of interviews. Thus, the total number of words in the new C1 (considering only the informants' production) was 24390, and the mean word count was 871.03 per contributor. In the British speakers' corpus (C2), the total number of words considered was 21509, and the mean word count was 796.62 per contributor. In Corpus 3, the total number of words was 18094 and the mean word count per contributor was 1005.22.

After transcription by qualified native speakers of English, the three corpora were tagged at the University of Northern Arizona under the supervision of Prof. Douglas Biber. It was impossible to obtain the exact number of words from each group of speakers or each subject; hence in the final word count we had a few words more in Corpora 1 and 2 than in Corpus 3 (Table 1).

Table 1. Corpora word counts

Corpus C1	Corpus C2	Corpus C3	Total number of words
24390	21509	18094	63983

[2] 18 informants were the students who had been interviewed for corpus 3 after having completed two years of their English Studies degree. The remaining 10 were selected at random.

4.3 Categorisation of lexical bundles

Biber et al. (1999) considered lexical bundles all those word combinations that recurred over 10 times in a million words and were repeated in five or more texts in the Longman Corpus. Later, Cortes (2004), Biber et al. (2004) and Hyland (2008b) established the cut-off point of 20 times per million words for large written corpora, whereas for relatively small spoken corpora a raw cut-off frequency is often used ranging from 2-10 (Altenberg 1998; De Cock 1998). However, the actual cut-off frequency used to identify lexical bundles is somewhat arbitrary.

Our study focused on 4-word bundles because they are more common than 5 or 6-word bundles and offer a wider range of structures and functions than 3-word bundles which, on the other hand, are much more frequent in academic prose (Biber et al., 1999). Moreover, working with 4-word bundles allows us to establish comparisons with other studies of a similar type (Biber & Barbieri 2007; Biber et al. 2004; Cortes 2004; Hyland 2008b). A sequence must be used in at least 3 to 5 different texts to be counted as a lexical bundle (Cortes 2004; Biber & Barbieri 2007). In this context, in the present study the 4-word lexical items must recur in at least 3 texts to be considered a lexical bundle. A smaller number of occurrences could be considered idiosyncratic of the speakers.

A free to use software tool (http://conc.lextutor.ca/tuples/eng/) was used to generate 4-word bundle lists for the texts of each corpus. Some word sequences containing words identifying the students (e.g. *English, United Kingdom*) or any other repeated context-dependent bundles were manually excluded from the extracted bundle lists.

The number of types and tokens across the three corpora are shown in Table 2. It is worth mentioning that the lowest number of lexical bundles, both in terms of types and tokens, was registered in corpus 2, collected from British students. The most obvious deduction looking at the types (40) and the tokens (131) in C2 is that native speakers tend to repeat lexical bundles less than non-native speakers of the language.

Table 2. Number of lexical bundles in the three corpora

Corpus	Number of lexical bundles (types)	Number of lexical bundles (tokens)	Type/token ratio
1	44	178	0,24
2	40	131	0,30
3	59	233	0,25

After comparing the frequencies and patterns across the disciplinary corpora, all the bundles were categorised structurally, in terms of their grammatical types, and functionally, according to their meaning in the texts. In this study Biber et al's (2004) classification has been used for the structural and functional analysis, since their study was carried out considering oral and written samples. According to this classification, there are three main structural types: a) lexical bundles that incorporate verb phrase fragments; b) lexical bundles that incorporate dependent clause fragments; and c) lexical bundles that incorporate noun phrase and prepositional phrase fragments. The different types and subtypes are listed in Tables 5 and 6.

5. Results and discussion

5.1 Lexical bundles in our corpora

As shown in Table 2, we found 44 different lexical bundles in C1, 40 in C2 and 59 in C3, totalling 178, 131 and 233 individual cases respectively, which accounts for 0.72% of the total words in C1, 0.61% in C2 and 1.28% in C3. Notably, C1 and C3 have 9 lexical bundles in common; however, none of them can be found in C2.

I like very much, *In the first picture* and *I I don't know* were the most frequent lexical bundles in C1, C2 and C3 respectively. Surprisingly, there are no lexical bundles common to all three corpora. However, as shown in Table 3, some coincidences exist between C1 and C3 (both corpora of non-native speakers of English), which share 9 lexical bundles (in bold), and between C2 and C3 which share just 1 (underlined). Our results do not coincide with those reported by Chen and Baker (2010) who found several bundles common to three corpora of native and non-native academic writing.

Table 3. 40 of the most common lexical bundles in the three corpora

Corpus 1	Freq.	**Corpus 2**	Freq.	**Corpus 3**	Freq.
i like very much	28	in the first picture	6	i i don't know	9
are a lot of	8	the third picture	4	**i would like to**	9
there are a lot	8	very happy with it	4	**or something like that**	8
in the in the	7	my mum and dad	4		
and i don't know	7	i've been to france	4	don't know how to	7
i don't know i	6	in the morning and	4	**i don't know how**	7
like it very much	6	i thought it was	4	in the first picture	7
i don't know what	6	in the fourth picture	4	i think it was	6
or something like that	6	and i would say	4	**i don't know i**	5
		country that i've visited	4	**i don't know the**	5
i want to go	6			in the second one	5
how do you say	5	it was a bit	3	**it's not the same**	5
a lot of things	5	she seems to be	3	i don't know if	5
i i want to	5	i think in the	3	**how do you say**	4
i like it very	5	to go to the	3	i don't know and	4
i don't know the	4	it was really good	3	i don't know it's	4
go to the cinema	4	i'd like to go	3	it's a it's a	4
no i don't know	4	was a bit strange	3	in in in the	4
don't know what to	4	don't think i could	3	the second time i	4
i don't know how	4	i don't think i	3	when i was there	4
mm i don't know	4	in the u k	3	know how to say	4
i go to the	4	met a lot of	3	mm i don't know	4
a lot of english	4	quite a few times	3	in the in the	4
know what to do	3	doesn't look very happy	3	would like to to	3
do you say that	3			i was there i	3
it's very beautiful and	3	look very happy with	3	don't know if i	3
	3	happy with what she	3	i i really like	3
. and the last one	3	it's a lot more	3	to go to the	3
i was in a	3	the the the the	3	i think it's a	3
want to go there	3	it looks like he's	3	**a lot of things**	3
was going to be	3	and then in the	3	a lot of people	3
i don't know but	3	and things like that	3	i don't know because	3
for me it was	3	she's showing her friends	3		
it's not the same	3			a portrait of a	3
similar to spanish people	3	o'clock in the morning	3	in the second picture	3
the next city we	3	with what she sees	3	she is showing the	3
in the third one	3	it to her friends	3	so we had to	3
i would like to	3	showing it to her	3	**i don't know what**	3
doesn't want to continue	3	it was very different	3	there is a a	3
		i want to go	3	i don't know mm	3
with a lot of	3	and it was really	3	in in the first	3
i went to england	3	she's showing it to	3	i i would like	3
he doesn’t want to		begins to draw her	3		

5.2 Structure of bundles

As shown in Tables 4 and 6, the bundles were categorised according to their structure and function (Biber 2004: 381, 384) From the structural point of view the three corpora offer significant differences in terms of the types of bundles used and in terms of percentages (Tables 4 and 5).

Table 4. Raw percentages of structural types in C1, C2 and C3

Structural types	**C1**		**C2**		**C3**	
	Tokens	*%*	Tokens	*%*	Tokens	*%*
1. Lexical bundles that incorporate verb phrase fragments	27	*61.31*	21	*52.50*	32	*54.23*
2. Lexical bundles that incorporate dependent clause fragments	6	*13.63*	4	*10.00*	11	*18.64*
3. Lexical bundles that incorporate noun phrase and prepositional phrase fragments	11	*25.00*	15	*37.50*	16	*27.13*
Total	44	*100*	40	*100*	59	*100*

As the results also indicate, there are important differences in the structural types of bundles used in the three corpora. The figures reveal that, in conversation, the highest percentages of lexical bundles incorporate verb phrase fragments (61.31%, 52.50% and 54.24 % respectively in C1, C2 and C3), whereas Biber et al. (2004: 380) report that 90% of the lexical bundles incorporated verb phrase fragments in their study. The informants in Corpus 1 use a much higher percentage of "Lexical bundles that incorporate verb phrase fragments" than those in corpora 2 and 3 which share similar rates of use. However, this trend changes in the use of "Lexical bundles that incorporate dependent clause fragments", because the percentages of the Spanish speakers of C1 are closer to native speakers of English (C2) than to C3. Similar percentages of use are shared by C1 and C3 in the employment of "Lexical bundles that incorporate noun phrase and prepositional phrase fragments".

No statistically significant differences were found when analyzing the results shown in Tables 4 and 5. In Table 4 three chi-squared tests were performed, juxtaposing the results of C1 and C2 (*p-value = 0.454*); C2 and C3 (*p-value = 0.722*); C1 and C3 (*p-value = 0,366*). In the case of Table 5, the three structural types were subjected to individual statistical analysis: a chi-squared test (*p-value = 0.532*) was used for "Lexical bundles that incorporate verb phrase fragment". Another chi-squared test revealed no statistically significant differences for "Lexical

bundles that incorporate dependent clause fragments" (*p-value = 0.829*). Finally, a last chi-squared test was used for "Lexical bundles that incorporate noun phrase and prepositional phrase fragments" (*p-value = 0.196*).

For comparative purposes, we will consider Corpus 2 as the control corpus, since it was collected from native speakers of English and lexical bundles are considered expressions "universally presented as typically native-like"[3] (Granger, 1998).

A more detailed analysis of these results reveals that, as shown in Table 5, the first structural category, "Lexical bundles that incorporate verb phrase fragments**"**, registers the highest number of occurrences with respect to the other categories. The percentage values reveal that there are no occurrences in the categories Discourse marker+VP fragment", Verb phrase (with passive verb) and Yes-no question fragments in any of the three corpora. This finding seems consistent with the type of interviews carried out where students had to speak about personal experiences and tell a story by describing a series of pictures. However, there are important differences in the use of 1st/2nd person pronoun + VP fragment since 28.57% of the bundles used by native speakers of English fall in this category, whereas in the case of the native speakers of C1 and C3 the bundles amount to 48.92% and 43.75% respectively. These data in corpora 1 and 3 are similar to those described by Biber et al. (2004: 380) who report that approximately 50% of these lexical bundles begin with a personal pronoun+verb phrase. Surprisingly, in our corpora, the Spanish informants followed this trend, whereas the native speakers differed strikingly from such finding. Hence, it seems more likely possible that the less instruction there is on language, the greater the use of personal pronouns in oral discourse. As for the category 3rd person pronoun +VP fragment, the informants of C2 exhibit the highest percentage of use (38.09%), followed by those interviewed in C3 (18.75%) and the informants of C1 (14.81%). This could be an indicator that the use of the 3rd person pronoun + VP fragment increases after instruction and resembles the way native informants use this grammatical category.

[3] I am aware of the implications of ELF paradigm for EAP research (Björkman, 2011). However, one of the most important issues for EAP instruction is the needs and expectations of the specific group. C1 and C3 informants are enrolled in the English Studies degree.

Table 5. Detailed percentages of structural types in C1, C2 and C3 (actual numbers of occurrences in brackets)

Structural types	**Subtypes**	**C1**	**C2**	**C3**
1. Lexical bundles that incorporate verb phrase fragments	1a. 1st/2nd person pronoun + VP fragment	(13) 48.92%	(6) 28.57%	(14) 43.75%
	1b. 3rd person pronoun + VP fragment	(4) 14.81%	(8) 38.09%	(6) 18.75%
	1c. Discourse marker + VP fragment	–	–	–
	1d. Verb phrase (with non-passive verb)	(9) 33.33%	(7) 33.33%	(11) 34.37%
	1e. Verb phrase (with passive verb)	–	–	–
	1f. Yes-no question fragments	–	–	–
	1g. WH-question fragments	(1) 3.70%	–	(1) 3.12%
2. Lexical bundles that incorporate dependent clause fragments	2a. 1st/2nd person pronoun+dependent clause/fragment	(5) 83.33%	(3) 75%	(9) 81.81%
	2b. WH-clause fragments	–	–	–
	2c. If-clause fragments	–	–	(1) 9.09%
	2d. To-clause fragment	(1) 16.67%	(1) 25%	(1) 9.09%
	2e. That-clause fragment	–	–	–
3. Lexical bundles that incorporate noun phrase and prepositional phrase fragments	3a. Noun phrase with of-phrase fragment	(3) 27.23%	–	(4) 25%
	3b. Noun phrase with other post-modifier fragment	–	(1) 6.66%	–
	3c. Other noun phrase expressions	(4) 36.40%	(6) 40%	(3) 18.75%
	3d. Prepositional phrase expressions	(3) 27.23%	(8) 53.33%	(9) 56.25%
	3e. Comparative expressions	(1) 9.04%	–	–

It should be highlighted that the addition of the categories 1st/2nd person pronoun + VP fragment and 3rd person pronoun + VP fragment of the three corpora show similar results: non-native students concentrate on the 1st/2nd person pronoun +VP fragment, whereas native students do not rely as much on their personal experiences, as illustrated below:

> .. the ... how to change lives and how your like and .. *and I don't know* and make you .. well the poverty to .. to make us richer ... and it's quite unfair .. (C1)
>
> .. *I don't think I* have a .. specific type of film I like .. like a different range .. of films erm (¿?) ... like probably more: .. action films are my favourite and then like ... (C2)
>
> your .. letter writing you know at your home erm .. *I don't know I* don't know what to do very long (C3)

As expected, and in good agreement with the results described in the previous category, in the second group, including "Lexical bundles that incorporate dependent clause fragments**",** some subcategories were absent, namely WH.clause fragments and That-clause fragment. The subcategory If-clause fragments registered only 1 occurrence, and To-clause fragment showed only 1 occurrence in C2 and C3 respectively. In contrast, $1^{st}/2^{nd}$ person pronoun+dependent clause/fragment showed the highest percentages of use in the three corpora, with 5, 3 and 9 occurrences respectively, suggesting a trend of relying on the use of more personal pronouns, as the students are less proficient in the use of the language. These results are consistent with the nature of the interviews and also with the idea that speakers in general and especially non-proficient speakers tend to use personal pronouns focusing the information on their own world and experiences as previously stated.

> the first year you go out all night .. and then you .. you are bored your well *I want to be* pained (C1)
>
> come back to Manchester for your final year and your like oh god *I want to go* abroad again .. but yeah no definately definately go back to both of those places ... (C2)
>
> .. er (que es er?) he told me okay *if you want to* be .. a lecturer I know how to English is that saying like have you (C3)

The last structural category, comprising "Lexical bundles that incorporate noun phrase and prepositional phrase fragments**",** registers the highest number of occurrences with respect to the other categories (Table 5). The subcategory Noun phrase with of-phrase fragment reveals high percentages in C1 (27.23%), 25% in C3 and none in C2, which means that only non-native speakers of the language use it. However, the most common structure for C2 and C3 is Prepositional phrase

expressions (53% and 56.25% respectively), which registers only 27.23% of the occurrences in C1. This structure is commonly used to show logical relationships between prepositional elements. It should be noted that the structure Noun phrase with of-phrase fragments is one of the most commonly used in academic prose as reported by Biber et al. (2004: 282) who state that "this structure accounts for 70% of the common bundles in academic prose" and also by Hyland (2008b: 10) who informs that "this expression comprises about a quarter of all forms in his corpora of academic texts". However, in our study, this structure accounts for almost 10% of bundles in C1 and a bit less in C3, whereas native speakers of English in C2 do not use it. This fact lends support to the idea that the spoken production of Spanish speakers shares some characteristics of written language. It would seem that their foreign language instruction may have been based on grammar rules rather than colloquial speech.

> also you you know *a lot of people* and that area a good thing .. you know people from .. (C1)

> or ... that's what makes .. them funny *and things like that* and then that builds up and ... (C2)

> she isn´t interested in the media *or something like that* .. and all .. her classmates .. er makes (C3)

The remaining categories show no occurrences or minimal ones, as in the case of Noun phrase with other post-modifier fragment with only 6.66% in C2.

> at the picture. .and I don't think she's.. maybe not very *happy with what she* sees in it (C2)

5.3 Functions of bundles

As Table 6 indicates, no important differences were found among the functional categories across corpora. However, one prominent feature was the greater concentration of stance expressions in the three corpora, amounting to 62%, 53.9% and 66.1% in corpus 1, 2 and 3 respectively. Such results are in good agreement with the findings of Biber et al. (2004) and Biber and Barbieri (2007) who reported that stance bundles

account for over 60% in conversation. There were no occurrences in "Special conversational functions" in any of the three corpora and the category "Discourse organizers" exhibited almost three times more occurrences in C1 than in C2 or C3. Regarding "Referential expressions", the results seem to indicate that the tendency to use them increases with instruction, since the informants of C3 use them more than those of C1, although they fail to reach the percentages which correspond to the native speakers of English.

Discourse organizers and referential expressions are considerably less common than stance bundles, which is consistent with other studies on these types of expressions (Biber & Barbieri 2007).

Table 6. Percentages of use of functional types of lexical bundles across corpora (Biber 2004)

Functional types of lexical bundles	**C1**		**C2**		**C3**	
	Tokens	*%*	Tokens	*%*	Tokens	*%*
I. Stance expressions	28	*63.56*	23	*57.50*	38	*64.28*
II. Discourse organizers	5	*11.36*	2	*5.00*	3	*5.07*
III. Referential expressions	11	*24.97*	15	*37.50*	18	*30.41*
IV. Special conversational functions	–	–	–	–	–	–
Total	44	*100*	40	*100*	59	*100*

If we compare our results with those reported by Biber, Conrad and Cortes (2004) we can see that our percentages of Stance expressions (63.56, 57.50 and 64.28% for C1, C2 and C3 respectively) are similar to their results in conversation (69.05%). However, regarding Discourse organizers, the results of C1 (11.36%) are closer to those described by these authors in textbooks (11.11%) and in C2 and C3, our percentages (5.00% and 5.07% respectively) are similar to those reported for academic prose (5,26%).

With respect to the third category, Referential expressions, the results of C2 (37.50%) are similar to those found by Biber et al (2004) in classroom teaching (38.09%) while the results of C1 and C3 follow the same trend (24.97% for C1 and 30.41% for C3) after two years of instruction at University.

Summarizing the results shown in Table 4 we could conclude that the use of Stance expressions in the 3 corpora is characteristic of the conversation register. The use of Referential expressions in C2 is distinctive of the classroom teaching register, whereas in C3, the

percentages approximate those of C2. It seems that the use of referential expressions increases with instruction.

No statistically significant differences were found in Table 6; a chi-squared test was applied, obtaining a *p-value = 0.557*. In Table 7, the three functional types were subjected to individual statistical analysis: a chi-squared test performed for "Stance expressions", associating results in subtypes A and B (gathering, therefore, sub-subtypes "B1" to "B6" in "B"), showed statistically significant differences (*p-value = 0.0039*).

Nevertheless, no statistically significant differences were found in the two other functional types, either when performing a Z-Test for proportions (confidence level 95%) for "Discourse organizers", or when applying a chi-square test (*p-value* = 0.152) for "Referential expressions".

Details pertaining to the percentages allocated to the different subcategories of functional types of bundles are shown in Table 7.

Table 7 is based on the categories proposed by Biber et al. (2004). However, in the functional type "Stance expressions" and under the category Attitudinal/modality stance, we have identified three more subcategories that were not present in Biber et al's classifications, namely *opinion, like/dislike* and *description.*

"Stance Expressions" provide a framework for the interpretation of the following proposition. Epistemic stance bundles focus on the knowledge status of the information and attitudinal bundles express speaker attitudes (Biber 2004: 389). When considering the percentages of "Stance expressions", one of the most striking differences among the corpora is the high percentage of opinion bundles (both personal and impersonal) in C2 (56.64%), and the low percentages in C1 and C3 (3.56% and 5.30% respectively). This may be due to the fact that giving opinions requires a more elaborate use of language.

Table 7. Detailed percentages of functional types in C1, C2 and C3 (adapted from Biber et al. 2004). (Actual numbers of occurrences in brackets)

Functional types	**Subtypes**	**C1**	**C2**	**C3**
I. Stance expressions	A. Epistemic stance			
	- Personal	(11) 39.65%	(4) 16.94%	(23) 60.52%
	- Impersonal	–	–	–
	B. Attitudinal/modality stance			
	B1) Desire			
	- Personal	(6) 21.46%	(2) 8.60%	(5) 13.65%
	- Impersonal	–	–	–
	B2) Obligation/directive			
	- Personal	–	–	(1) 2.65%
	- Impersonal	–	–	–
	B3) Intention/prediction			
	- Personal	(3) 10.71%	(2) 8.60%	(2) 5.30%
	- Impersonal	–	–	–
	B4) Opinion			
	- Personal	–	(10) 43.60%	(1) 2.65%
	- Impersonal	(1) 3.56%	(3) 13.04%	(1) 2.65%
	B5) Like/dislike	(3) 10.71%	–	(2) 5.30%
	B6) Description	(4) 14.28%	(2) 8.60%	(3) 7.95%
II. Discourse organizers	A. Topic introduction/ focus	–	–	–
	B. Topic elaboration/ clarification	(5) 100%	(2) 100%	(3) 100%
III. Referential expressions	A. Identification/focus		(1) 6.66%	(2) 11.11%
	B. Imprecision	(3) 27.7%	(1) 6.66%	(1) 5.55%
	C. Specification of attributes			
	C1) Quantity specification	(6) 54.54%	(5) 33.30%	(4) 22.20%
	C2) Tangible framing attributes			
	C3) Intangible framing attributes			
	D. Time/place/text reference			
	D1) Place reference	(1) 9.09%	(2) 13.32%	(3) 16.65%
	D2) Time reference		(3) 19.98%	(1) 5.55%
	D3) Multi-functional reference	(1) 9.09%	(3) 19.98%	(7) 38.85%

The remaining subcategories also show some differences. The most relevant is the low percentage of personal involvement of C2 (16.94%) in comparison with C1 (39.65%) and C3 (60.52%). Another feature of C2 is the even distribution of percentages in the remaining subcategories of Attitudinal modality stance (8.60% *desire*, *intention* and *description*, respectively) in contrast with the irregular percentages allocated to the subcategories in C1 and C3, where *desire* totals 21.46% and 13.25% respectively, *intention* 10.71 and 5.30, and *description* 14.28 and 7.95. Surprisingly, there are no occurrences in the subcategory *like/dislike* in C2, whereas this category registers 10.71 and 5.30 in C1 and C3 respectively.

> erm one book .. erm ... erm .. Shakespeare ... poesía poem yeah poems yeah *I don't know the name* (C1)

> Em..it was really hot when I went to Paris..I think it was the hottest day they'd had for about.. twenty years (C2)

> which she doesn't *I don't know why* cos she with the effect of the reality I don't know (C3)

"Discourse organizing bundles" serve the functions of Topic introduction/focus and Topic elaboration/clarification. In our corpora, with respect to the "Discourse Organizers**",** there were no occurrences in Topic introduction/focus. All 100% of the bundles take place in Topic elaboration/clarification, albeit with few occurrences.

"Referential bundles" usually identify an entity or highlight some particular attribute as especially important (Biber 2004: 393). In the percentages allocated to **"**Referential expressions**"**, a noteworthy feature is the high presence of Imprecision in C1 (27.7%) in comparison with 6.66% and 5.55% in corpora 2 and 3.

The occurrences of C1 take place in Specification of attributes: Quantity specification (54.54%), Imprecision (27.7%) and Time/place/text reference with Place and Multi-functional reference (9.09%). However, in C2, the percentages are distributed among Identification (6.66%), Imprecision (6.66%), Quantity specification (33.30%), Place reference (13.32%), Time reference (19.98%) and Multi-functional reference (19.98%). In C3 there are occurrences in all categories and the percentages of C3 are more similar to C2 than to C1,

which means that the use of referential expressions has improved with instruction.

> and h=here there is a lot of .. th=*there are a lot of* .. tourists only tourists and museums .. em .. (C1)
>
> take your own lessons but here we're told what we're gonna study over there *it's a lot more* relaxed like I said (C2)
>
> erm .. er for example in London er there are *a lot of things* around London and I think (C3)

Perhaps the most important finding resulting from the analysis and comparison of the functional bundles in the three corpora is the evolution that can be seen in the use of "Discourse organizers" and "Referential expressions" by C3 informants. This finding reflects the importance of instruction in the use of bundles.

6. Conclusions and pedagogical implications

The main objective of this paper was to identify and analyse 4-word lexical bundles in three oral corpora, applying a corpus-driven approach. We have shown the overall distribution of such lexical bundles and their typical structures and functions in the three corpora from native English speakers and students of English of a similar age range and education.

As has been shown in this paper C1 and C3 (corpora of non-native speakers of English) offer a larger number of lexical bundles than C2 (native speakers of English) contrary to the results reported by Chen & Baker (2010), and Ädel and Erman (2012) for academic writing. There are important differences in the structural types of bundles used in the three corpora, the lexical bundles which incorporate verb phrase being those which register the highest percentages in the three corpora.

Regarding the functional types of lexical bundles, one of the most prominent features is the greater concentration of stance expressions in the three corpora, which coincides with the results of other researchers. As we have shown, the Discourse organizers bundles share more features with written than with oral registers as described by Biber et al (2004). C1 exhibits bundles similar to those likely to appear in textbooks, whereas the bundles analysed in C2 and C3 are more similar to those found in academic prose by the same researchers. With respect to the

Referential expressions, the results show that their use more resembles classroom teaching than conversation in C2; as can be seen, use of referential expressions increases with instruction, so that the percentages found in C3 are more similar to those registered in C2 than those described in C1. The type of interview carried out may explain the results. There was no proper conversation in the sense that there was no dialogue, since the interviewer was only allowed to ask a few questions and elicit conversation. This could be the reason why the informants made use referential expressions in a way similar to that described in classroom teaching, which is an intermediate register between oral and written.

Building on previous studies of lexical bundles (Biber et al. 2004; Cortes 2004; Hyland 2008b), the aim was to highlight the pedagogical implications of teaching lexical bundles to students of English by showing the differences between the samples collected from native students of English and learners of English. Biber and Barbieri (2007) suggest that, as these formulaic expressions are so frequent, we might assume that students will naturally acquire them and, consequently, that there is no need for them to be overtly taught. However, it is necessary to expose the students to more samples of spoken language in all environments and not only to instructional approaches. The findings of this study show that even though students might have frequently encounter these expressions in their classes, simple exposure to the frequent use of lexical bundles does not result in the acquisition and mastery of these expressions by university students.

I am aware of the difficulty in introducing lexical bundles effectively in L2 teaching curricula. Lewis (1993), Nattinger and DeCarrico (1992) and Willis (1990) proposed three major pedagogical frameworks, reviewed by Wray (2000) who found them all inadequate to some extent. Following Nation (2009), Byrd and Coxhead (2010) suggest that teachers should draw attention to bundles in class readings/class materials and propose that some explicit instruction should be provided. Then, after the instruction, keeping track of the bundles presented and studied in the classroom is also of paramount importance. Coxhead (2004) proposes the use of vocabulary boxes, Nation (2001) and Schmitt (2000) recommend vocabulary notebooks. Revisiting bundles regularly and creating opportunities for feedback (Webb, 2007) are also important techniques for the students to acquire them.

However, there are still two key issues in the teaching and learning of lexical bundles: the selection of the bundles to be taught and the activities to be used. More research should be done on the criterion for the selection of the bundles; most studies adopt the criterion of frequency when selecting the bundles to be taught; however, their function in discourse could also be a good factor to be taken into account. The sequencing of activities used to teach lexical in another point to be considered. Further attention should be drawn on these key points.

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