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*Win-win* -tilanteita ja *goodwilliä* Anglicisms in Finnish Doctoral Theses

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## VAASAN YLIOPISTO

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## TIIVISTELMÄ:

Tämä pro gradu -tutkielma on osa Vaasan yliopiston Englannin kielen laitoksen Anglismi-projektia, jossa tutkitaan englannin kielen vaikutusta yliopistomaailmassa. Tutkielmassa tarkastellaan suomenkielisissä väitöskirjoissa käytettyjä anglismeja, jotka tässä tutkimuksessa määritellään englanninkielisiksi sanoiksi ja ilmauksiksi. Tutkimusmateriaali koostuu neljästä Vaasan yliopistossa tehdystä väitöskirjasta, jotka edustavat neljää eri pääainetta eli aluetiedettä, markkinointia, nykysuomea ja tietotekniikkaa. Anglismeja tarkastellaan koodinvaihdon (code-switching) näkökulmasta, eli tutkitaan englannin ja suomen kielen vuorottelua väitöskirjoissa. Erityisesti tarkastellaan anglismien rakennetta jakamalla ne kahteen pääryhmään ja niiden alaryhmiin, mutta myös anglismien korostamista (flagging) ja funktioita tutkitaan. Oletuksena oli, että anglismien määrä ja niiden korostaminen väitöskirjoissa vaihtelee pääaineen ja väitöskirjan aiheen mukaan. Oletettiin, että teknisellä ja kaupan alalla, eli markkinoinnin ja tietotekniikan väitöskirjoissa, anglismit ovat yleisimpiä eikä niitä ole korostettu yhtä paljon kuin aluetieteen ja nykysuomen väitöskirjoissa, joissa anglismeja oletettiin esiintyvän vähemmän.

Pääosin tutkimustulokset tukivat oletuksia, sillä eniten anglismeja esiintyi markkinoinnin ja tietotekniikan väitöskirjoissa, ja tietotekniikassa anglismeja oli korostettu huomattavasti vähemmän kuin muissa aineissa. Suurin osa väitöskirjoissa esiintyvistä anglismeista oli täysin englanninkielisiä sanoja tai ilmauksia, ja vain tietotekniikassa suomen ja englannin kielestä muodostetut, kahta kieltä yhdistelevät sanat tai ilmaisut olivat yleisempiä. Anglismien yleisimpiä funktioita väitöskirjoissa olivat viestin korostaminen tai selventäminen sekä sanastollisen tarpeen täyttäminen, eli englanninkielisen sanan tai ilmaisun käyttäminen suomenkielisen vastineen asemesta. Jälkimmäinen oli yleisintä tietotekniikan väitöskirjassa, kun taas muissa aineissa anglismeja käytettiin korostamaan tai selventämään viestiä. Suurimmalla osalla anglismeista voitiin nähdä olevan yhtä aikaa useampia funktioita.

**AVAINSANAT:** Anglicism, code-switching, flagging, doctoral thesis, matrix language, embebbed language

#### 1 INTRODUCTION

In the modern world, people as well as languages interact with each other more than ever before. Interaction also involves a contact between languages, or according to Thomason (2001: 1), "[...] the use of more than one language in the same place at the same time". A contact between languages is practically a rule rather than an exception, and when any two people who speak different languages meet, they have to find a common language for communication. The language used in these situations is a *lingua franca*, or "common language" (Crystal 1997: 9; Wardhaugh 1986: 55), and most often it tends to be English.

One result of language contact is bilingualism, "[t]he practice of alternatively using two languages" (Weinreich 1968: 1), of which there are two types. Societal bilingualism occurs in society where at least two languages are spoken, whereas it is more difficult to determine which individuals are bilingual. Individual bilingualism has been defined in several ways and the criteria have been various. (Appel & Muysken 1987: 1–2.) For example, a bilingual person has been seen to be one who has a "native-like control of two or more languages" (Bloomfield qtd in Appel et al. 1987: 2), but also one who possesses some second-language skills in one of the following modalities: speaking, listening, writing, or reading (Macnamara qtd in Appel et al. 1987: 2–3). In comparison, a person "who regularly uses two or more languages in alternation is a bilingual." (Appel et al. 1987: 3). Sometimes the terms bilingual and bilingualism are used instead of the terms multilingual and multilingualism which refer to situations where three or more languages are used (ibid. 3).

This study is interested in the influence of English on Finnish language of science in doctoral theses. The theses have been written by academics who are bi- or multilingual according to the above definition by Macnamara. This means that they can read, write, speak or listen to a second language. Typically academics in Finland have a good command of English because of the Finnish education system where English has a major role. Also the domination of English in scientific context has contributed to this.

The use of several languages, or codes, in many situations has increased the number of bilingual people world-wide. For example, it has been estimated that 150–300 million people use English as a second language in multilingual setting. In Scandinavia English is only a foreign language but it is often used as a second language, for example in governmental institutions. (Crystal 1997: 54, 56.)

Code-switching, or switching between languages, has sometimes been seen as a negative phenomenon both by linguists and the general public. For example, it has been argued that code-switching speeds up language death instead of changing or evolving languages (Kelly-Holmes 2005: 12). Weinreich (1968: 73) has stated that "[t]he ideal bilingual switches from one language to the other according to appropriate changes in the speech situation (interlocutors, topics, etc.), but not in an unchanged speech situation, and certainly not within a single sentence." However, due to increasing research, attitudes to code-switching have become increasingly more positive during the past few decades. Nowadays code-switching is seen as "a natural phenomenon" and "an integral part of communication in bi- and multilingual communities". (Halmari 1997: 10.) Moreover, many researchers have remarked that code-switching enriches languages and is thus a positive phenomenon (Kelly-Holmes 2005: 12).

Code-switching and language contact have been studied a great deal during the past few decades. Most code-switching studies have, however, concerned spoken language, whereas the present study focuses on code-switching in written language. Studies on code-switching in spoken language include, for example, Magdolna Kovács (2001) who has studied code-switching and language shift in Australian Finnish and Australian Hungarian, and Timo Lauttamus (1990) whose study focused on code-switching and borrowing in the English of Finnish Americans in an interview setting. Carla Jonsson (2005), however, has studied code-switching in written language, namely in Chicano theatre writing. In her data code-switching, according to her, fulfils a number of different important functions, for example artistic and stylistic functions.

Code-switching studies have been conducted in Finland as well. For example, Anne-Marie Londen (1994: 204–205) found that code-switching to English was more frequent

than switching to Finnish in the informal speech of six male Swedish speakers in the Helsinki region. In her data English was used as phrases and idioms, whereas Finnish occurred as words. English was mostly "used as response turns or response components" (Londen 1994: 204–205). Examples of this are: "who cares", "bullshit", "so what else is new" (ibid. 204–205). She also noticed that the participants did not mark or remark upon code-switching to English. Furthermore, Mirja Saari (2006: 158), who studied Swedish youth slang in Helsinki, found that code-switching was an essential part of that language. She estimated that during the past three decades, code-switching had increased significantly among young Swedish speakers in Helsinki, and she even suggested that spoken language including code-switching might have an effect on written language because the language of text messages, e-mails, chats, and homepages is already close to spoken language.

Code-switching and the influence of English have also been studied recently at the University of Vaasa. For example, Johannes Sumuvuori (2007) studied in his MA thesis Anglicisms, or contact expressions, in the texts of the student newspaper of the University of Vaasa in 2003-2004. He included in his study both borrowings and codeswitches and found that adapted borrowings were the largest category followed by cross expressions. Flagging, that is the markedness of the contact expressions, was rare in his data. Functions of the contact expressions in the student newspaper were mostly transactional (i.e. content, clarity, shortness) but also symbolic (expressing emotions and social constructions). Katja-Maaret Niemi (2007) studied in her MA thesis Anglicisms in MA and MSc theses written at the University of Vaasa in 2004. She found that matrix language + embedded language constituents, matrix language + embedded language compounds in particular, were the most common type of Anglicisms in MSc theses, whereas in MA theses, the majority of Anglicisms were embedded language islands. In her study most Anglicisms occurred in Computer Science theses and fewest in Modern Finnish theses. According to her, flagging was more common in MA than MSc theses. Also in her study transactional functions were more common than social functions. The present study is part of the same project of the Department of English and it has been inspired by the two theses.

Anglicisms especially in popular culture and advertising have been studied a great deal, and there are several MA theses written on the subject. However, Anglicisms in scientific language have been studied less. For example, Anri Kontio (2001) found in her MA thesis that the number of Anglicisms in Finnish newspaper advertisements had grown notably in the years 1959, 1979, and 1999. However, Anglicisms in doctoral theses have not been studied before, and there are not many studies written on Anglicisms in language for special purposes either. One example is Saara Lallukka's (2005) MA thesis on Anglicisms in the annual reports of some Finnish exchange-listed companies, where she found that in average, there was one Anglicism per 84 words.

Sajavaara, Lehtonen, Leskinen, Pulkkinen, Räsänen & Hirvonen (1978: 40) studied Anglicisms in the language of popular culture. In their study Anglicisms were defined as all words that originate from English or mean an object or a concept originating from English as well as words that include English elements (Filipović qtd in Sajavaara et al. 1978: 26). Thus, for instance, borrowings, such as "televisio" (television), and loan translations, such as "kehonrakennus" (bodybuilding), were included in this definition. Sajavaara et al.'s (1978: 29) research material included both literary material, for example advertisements, news, pop magazines and fiction; and literary and visual material, for example TV programmes and comics. They excluded from their material "the special terminologies of different professional areas" (Sajavaara et al. 1978: 40) which are close to the topic of this thesis, namely academic language of different fields of study. The exclusion of special terminologies was justified in Sajavaara et al.'s study with the fact that English has a major effect on technical vocabularies and terminologies (Filipović qtd in Sajavaara et al. 1978: 26).

This master's thesis examines Anglicisms in doctoral theses written in Finnish from a sociolinguistic point of view as code-switches. The hypothesis is that there is a great deal of variation in the numbers, types, and functions of Anglicisms in Finnish doctoral theses in question, depending on the topics as well as the fields of study. The aim is to study the total quantitative data of code-switches, their number, structure, and function in four doctoral theses from four disciplines at the University of Vaasa, namely one thesis from Computer Science, one from Marketing, one from Modern Finnish, and one

from Regional Studies. The interest is on the differences between the disciplines, and also flagging, i.e. highlighting the Anglicisms, is studied.

As the material of this study is limited to four doctoral theses, it is not possible to draw general conclusions as to what causes the variation. Earlier studies have, however, suggested that the influence of English can be seen, for example, in technical vocabularies and terminologies (Filipović qtd in Sajavaara et al. 1978: 26). Also in international trade and information technology, English is the most important language of interaction (Sajavaara 1989: 83). Based on these observations it is presumed that most Anglicisms are encountered in the doctoral theses written in Computer Science and Marketing. The lowest number of Anglicisms is expected to be found in the doctoral thesis written in Modern Finnish. Flagging is expected to be most frequent in the thesis written in Modern Finnish, because in the field of linguistics norms of language have to be paid special attention, and it is expected that foreign words are treated differently from Finnish words. In the theses written in Computer Science and Marketing, however, flagging is expected to be rare, because Anglicisms are expected to be an established part of the terminologies of the fields.

In what follows, the material and method of the present study will be introduced in Chapters 1.1 and 1.2 respectively. The global use of English and its influence on other languages is discussed in Chapter 1.3. The scientific context is presented in Chapter 2 where English as an academic language in Finland as well as doctoral theses in Finland and at the University of Vaasa are discussed. For the present study, it is important to understand the context of the studied theses, because language is always affected by the context in which it is used. The theoretical framework of this study is presented in Chapter 3. It includes a discussion of code-switching and the differences between code-switching, borrowing and transfer as well as a discussion of the structure of code-switching. Flagging and functions of code-switching as well as Anglicisms as code-switches are also discussed in Chapter 3. Chapter 4 is the report and discussion of the findings. Finally, this thesis ends with conclusions and suggestions for further studies.

#### 1.1 Material

The original aim was to choose as the material for this study doctoral theses written in Finnish from five different fields of study, namely Communication Studies, Computer Science, International Marketing, Modern Finnish, and Regional Studies. These were chosen because the theses represent the four faculties of the University of Vaasa, that is the faculties of Business Studies, Humanities, Public Administration, and Technology. These fields of study are also the ones that Niemi (2007) included in her study. However, there was an unexpected problem as not all departments had doctoral theses written in Finnish. In Communication Studies, which is a fairly young field at the University of Vaasa<sup>1</sup>, there were altogether only four doctoral theses, of which one was in German and three in English. Moreover, as International Marketing did not have any doctoral theses, the more general discipline, Marketing, was chosen as the closest equivalent. In Computer Science and Marketing, most of the doctoral theses written at the University of Vaasa were in English, while in Modern Finnish and Regional Studies most of the doctoral theses were written in Finnish. As the Department of Communication Studies was excluded, the material of the study consisted of four doctoral theses from four departments, written in Finnish and completed in 2003–2005. There was one thesis from Computer Studies, one from Marketing, one from Modern Finnish, and one from Regional Studies. The chosen theses were the most recently published doctoral theses in the departments in question in autumn 2006 when the material for this study was sampled. The material is thus a small random sample of the theses written by autumn 2006 in four fields of study in four departments at the University of Vaasa.

The four doctoral theses studied very different topics relevant to their fields of study. The doctoral thesis in Computer Science was a case study carried out in the Department of Computer Science at the University of Vaasa, and it focused on the threats that can slow or hinder progress of undergraduate students of IT in their studies. Three methods were used in the study: an analysis of Computer Science students' credit points during

<sup>1</sup> The Department of Communication Studies at the University of Vaasa was established only in 1992.

their studies, a passive role-playing technique to reveal the students' perceptions of their study area, and a questionnaire concerning the students' motives, perceptions of the field of study and job opportunities, and reasons for studying information technology. (Jousranta 2005.) The thesis is 255 pages long. I expect that answers to the questionnaire were given in Finnish, whereas some of the source literature was in English, thus possibly resulting in Anglicisms.

The doctoral thesis in Marketing studied a Finnish firm operating in furniture industry and its business relationship with an international client. The focus was especially on a business relationship affected and developed by the pressures of international competition. The study aimed to find out the development of a development culture in a firm and its correct management. The study was based on examining and analysing the firm over a period of 12 years. The data of the study was received mainly by interviewing and discussing with the people most actively involved in the firm and the business relationship. (Humala 2004.) The thesis is 278 pages long. Interviews and discussions were mainly in Finnish, but also in this study English language source material was used which could show in the thesis as Anglicisms.

The doctoral thesis in Modern Finnish concentrated on psychiatry and the way language is used in the field. The interest was especially in how the mental disorders are named, and also the differences between specialists and laymen in interpreting the language of psychiatry as well as the reasons for laymen's negative attitudes. The material consisted of two official disease classifications. (Kapiala 2003.) Out of the four doctoral theses included in this study, this thesis is the longest, consisting of 394 pages. As English influence on medical language is strong today and English language source material was used also in this study, I expect that Anglicisms are found also in this thesis. However, the fact that the field of study is related to linguistics is expected to reduce the number of Anglicisms in the thesis, as it is hypothetical that a language scholar would follow the widely accepted norm against code-switching.

The doctoral thesis in Regional Studies consists of six reprinted articles written in 1996–2003, which makes the structure of the thesis different from that of the three other

theses. The purpose of the thesis was to examine the relationship between the Finnish countryside, or the rural, and the contemporary Finnish society. The research material included, for example, regional statistics and essays from a writing competition. (Rosenqvist 2004.) The thesis in question consists of 173 pages which makes it the shortest out of the four theses. The essays used in the study are expected to have been written in Finnish, whereas the statistics might include English. Like all the other doctoral theses, also this one includes source literature in English. Thus, all the theses are expected to include Anglicisms but a different number of them, depending on the methods and sources used in the theses.

#### 1.2 Method

The present thesis studied the use of Anglicisms in four doctoral theses written in Finnish. The aim was to study the extent of English influence on the Finnish of the academic dissertation in terms of the number, structure, and function of Anglicisms. The focus was on Anglicisms that had retained their English orthographically, such as "anxiety" (Humala 2004: 18), as well as those that mixed Finnish and English, for example "ranking-lista" (ranking list) (Jousranta 2005: 179, 202). In this, the present study is similar to that concluded, for example, by Helena Halmari (1997: 47) who excluded from her study all "English items [that] were totally assimilated to the Finnish phonological system [...] as non-codeswitches." Examples of such items in Halmari's material, which was spoken language, were hamburger and butter "pronounced 'in Finnish'" as "hampurkki" and "putter" (ibid. 47). In the present study English items that were adapted to Finnish, for example "ESDP-dokumentti" (ESDP document) (Rosenqvist 2004: 102), were not included and neither were items that could not be proved to originate from English. Also items originating from other languages than English were excluded, for example "utopia" (Kapiala 2003: 64, 162) that originates from Greek and "testi" (test) (Humala 2004: 137) and "trendi" (trend) (ibid. 20, 45, 147) that have entered the Finnish lexicon through Swedish. However, items that had

<sup>2</sup> ESDP comes from European Spatial Development Perspectives (Rosenqvist 2004: 102).

maintained their English orthography, even with a Finnish ending attached to them, as in "hypeimmät" (the most hyped up) (Jousranta 2005: 116), were included in this study. In addition, acronyms that originate from English, for example "GT" (Jousranta 2005: 73), were included in this study, excluding names.

Following Halmari's (1997: 46) example, all proper names were excluded from this study because they are established names. They would have composed a significant number out of all Anglicisms in this study, thus affecting the result considerably. Proper names excluded from this study were, for example, place names, names of books, magazines, journals, articles, manuals, documents, reports, agendas, policies, programmes, softwares, operating systems, browsers, websites (and titles and addresses of webpages), information networks, techniques, organisations, institutions, companies, associations, teams, workshops, symbosiums, conferences, groups, or other forums. Also titles and names of disciplines were excluded, as well as diagnostic terms, both Finnish and foreign, because it would not have been possible to verify their origin in the scope of this study. Furthermore, it is presumed that most of the foreign diagnostic terms in the thesis completed in the Modern Finnish department originate from Latin or Greek. Examples of excluded proper names were "Internet" (Jousranta 2005: 15), "SPSS-ohjelmisto" (SPSS software) (ibid. 148), "International Classification of Diseases" (Kapiala 2003: 33), "Diagnostic and Statistical Manual of Mental Disorders" (ibid.), "ESDP-asiakirja" (ESDP document) (Rosenqvist 2004: 55), and "CAP"<sup>5</sup> (ibid. 102). As opposed to Halmari (1997: 46), quotations were included in this study, and they composed only a small minority of Anglicisms in the data.

The method applied in this study comes from code-switching studies carried out mostly on spoken language. The structural analysis of Anglicisms is carried out with the help of the Matrix Language-Frame (MLF) Model by Carol Myers-Scotton (1993). The MLF Model has also been applied by Katja-Maaret Niemi (2007) in her unpublished MA

<sup>&</sup>lt;sup>3</sup> GT comes from grounded theory (Jousranta 2005: 73).

<sup>&</sup>lt;sup>4</sup> SPSS comes from Statistical Package for the Social Sciences.

<sup>&</sup>lt;sup>5</sup> CAP comes from Common Agricultural Policy.

thesis on Anglicisms in MA and MSc theses at the University of Vaasa. According to the MLF Model, there are three possible structures in which the two languages can coexist: 1. matrix language (ML) + embedded language (EL) constituents, 2. matrix language islands, and 3. embedded language islands (Myers-Scotton 1993: 6). Only ML + EL constituents and EL islands are included in this study. The first category, ML + EL constituents, includes morphemes from at least two languages participating in codeswitching (ibid. 6). An example of an ML + EL constituent is "case-tutkimus" (case study) (Jousranta 2005: 30) where English and Finnish words are combined to create a mixed compound. The second category applied in this study, EL islands, are entirely in the EL (embedded language) (Myers-Scotton 1993: 6). An example of an EL island is "emotional intelligence" (Kapiala 2003: 78), while an ML island is, for example, "yhteiskunnallisen toiminnan uudelleen organisointi" (re-organizing of societal activity) (Rosenqvist 2004: 97).

Some code-switching studies have also paid attention to flagging, that is marking of foreign items. The analysis of flagging of the Anglicisms is in the present study based on Poplack et al. (1990) (qtd in Kovacs 2001: 190), Kovács (2001), and Weinreich (1968). Poplack et al. and Kovács discuss flagging in speech, but this study examines flagging in written language which means that the methods have to be modified. Weinreich, however, discusses the marking of foreign expressions in writing as well, although he does not use the concept of flagging. In this thesis the use of the following typographical devices is seen to indicate flagging: quotation marks (according to Weinreich), italics, and parentheses. In addition, a few Finnish expressions, such as "niin sanottu", or "ns." in short (so-called), preceding some Anglicisms are considered as indicators of flagging. An example of flagging in a sentence is shown below.

(1) Hyötydiskurssi (*utilitarian discourse*) keskittyy täysin toiminnan taloudelliseen ulottuvuuteen. (Rosenqvist 2004: 99.)<sup>6</sup>

Utilitarian discourse focuses totally on the economic dimension of activity.

<sup>6</sup> Translations of the examples are my own, and the Anglicisms in the examples are bolded.

In example (1), the Anglicism is flagged with two devices, i.e. it is double flagged. The Finnish equivalent for the Anglicism is given first, and the following English element is separated from the Finnish text with parentheses and it is also italicised. Anglicisms in the theses can be flagged with one or more devices, and the flagged elements can be of various lengths, i.e. from single words to whole sentences and several sentences.

Academic language, as opposed to ordinary language, is formal and includes field-specific terminology. In ordinary spoken language code-switching may serve a number of functions, whereas in written academic language the functions are not as diverse. According to François Grosjean (1982), there are ten reasons for code-switching in spoken language, and these ten reasons are applied in the present study. For example, the use of field-specific terminology in English can be seen as the function of showing expertise (see example (11) on page 50). The study of the functions of code-switching in academic Finnish will form the third part of the present analysis. The reasons and functions are discussed in more detail in Chapters 3.4 and 4.4.

The Anglicisms in the four doctoral theses completed in four fields of study were, thus, analysed quantitatively and qualitatively. The theses were compared in terms of the number, quality, and functions of Anglicisms as well as the flagging of Anglicisms. The results will be presented both in writing and in tables in Chapter 4. Before discussing the context in which the Finnish doctoral theses were written, the use of English and its influence globally during the past 50 years are discussed.

## 1.3 Global Use of English and Its Impact on Other Languages

As a dominant language, English is quite young. The global expansion of English started in the 1950s, and today it has achieved a dominant position as a world language with an estimated 1 200–1 500 million speakers (Crystal 1997: 61, 63). English is used as the official or working language in most organizations worldwide, and also numerous European as well as Asian organizations from science to sport rely on English and use it as the lingua franca in their activities. In Scandinavia the use of English is expanding,

and nowadays it is used there even more than in countries where it has traditionally been an important language. (Crystal 1997: 56, 79–81.) Globally English dominates, for instance, the language of advertising and the media, but it is also an important language of science. For example, in fields such as medicine, international trade, and information technology, English is the most common language of interaction (Sajavaara 1989: 83). Already in 1981 English was widely used in scientific periodicals: in biology and physics 85 per cent and in medical science 73 per cent of the papers were written in English. In mathematics and chemistry the figures were 69 per cent and 67 per cent, respectively. Since then, these numbers have increased, and English is nowadays used in many other fields as well. For example, in 1995 linguistic papers and papers in computer science were mainly written in English. (Crystal 1997: 102.) Inevitably, this development has also increased the influence of English on other languages.

Pirkko Nuolijärvi (2005: 7) states that the Finnish language in general includes several concepts that originate from the English speaking world and that are made to look Finnish. One example of a concept that has been created with the help of English is the well-known *suomalainen design* (Finnish design) (ibid. 6–7). Although this concept has been created to illustrate something characteristically Finnish, it includes an English element "design". In addition, many jobs in the fields of business and technology, in particular in multinational corporations, in Finland have an English title.

English is also the most popular foreign language among Finnish schoolchildren: over 80 per cent choose it as the first foreign language (Moore & Varantola 2005: 133). The tendency is similar with high school students: in 2006 almost all of the nearly 32 000 students graduating from Finnish high school had studied English. In comparison, German was studied by some 35 per cent and French some 20 per cent of the students. (Tilastokeskus [Statistics Finland] 2006.)

The expansion and popularity of English can also be seen in universities throughout the world. Since the 1960s, English has been the language of instruction even in countries where it is not an official language, such as The Netherlands (Crystal 1997: 102–103). Also in Finland, universities and polytechnics offer some 400 international study

programmes, of which some 270 are degree programmes (International Study Programmes Database 2006). For example, the oldest and biggest university in Finland, the University of Helsinki, offers seven master's degree programmes in English and three joint degree programmes provided together with other Finnish or foreign universities (University of Helsinki 2006). Also the University of Vaasa, a significantly smaller university, offers as many as five master's degree or master's programmes in English (Vaasan yliopisto 2007a). The most common language of instruction in these programmes is English (International Study Programmes Database 2006). In fact, internationalisation is seen as one of the tasks of Finnish universities (cf. Hiidenmaa 2006: 35; Markkanen 2006: 37; Opetusministeriö [Ministry of Education] 2007).

The English language has had a growing influence on other languages for the past 50 years, and the influence is still growing. This has, inevitably, had an impact on academic language as well, which nowadays includes a great deal of English terminology. Also for academic texts, the context in which they are written is highly important, because it has an effect for the language used in the texts. The scientific context in which the doctoral theses analysed in the present study were written is the topic of the following chapter. Also doctoral theses in Finland and at the University of Vaasa are discussed in the next chapter.

#### 2 SCIENTIFIC CONTEXT

Language is always understood in the unique context in which it is used and which is created by the people involved. Contextualisation in general has been explained with the help of art and more specifically with vocal music. For example, in Bach's vocal music melodies, harmonies, rhythm, and orchestration guide the interpretation of language, but in everyday life these cues for interpreting language are given vocally or non-vocally. (Auer 1992: 1, 3–4.) In general, contextualisation includes "all activities by participants which make relevant, maintain, revise, cancel... [sic] any aspect of context which, in turn, is responsible for the interpretation of an utterance in its particular locus of occurrence." (Ibid. 4.) "An aspect of context" is, for example,

the larger activity participants are engaged in (the "speech genre"), the small-scale activity (or "speech act"), the mood (or "key") in which this activity is performed, the topic, but also the participants' roles (the participant constellation, comprising "speaker", "recipient", "bystander", etc.), the social relationship between participants, the relationship between a speaker and the information he conveys via language ("modality"), even the status of "focused interaction" itself. (Auer 1992: 4.)

Context is not a stable state but changes constantly. Furthermore, there is an interactional relationship between context and text, which means that not only context, but also language, has an effect on the other. In addition, participants in any given interaction make context available. Participants contextualize language with "form-related means" (Auer 1992), which are called contextualisation cues. Contextualisation cues include, for example, gestures, postures, gaze, and linguistic variation (including code-switching). Different cues have a different effect depending on the speech community. For example, switching between languages gives different signs in different speech communities, and the associations attached even to the same language pair may differ. (Auer 1992.)

In the following chapters, contextualization is discussed from the point of view of this study. First, the use of English in Finnish scientific language is explored followed by discussion of the language of science in Finland in general. Finally, postgraduate studies

in Finland and at the University of Vaasa are discussed, including a discussion of doctoral theses in Finland in general.

## 2.1 English as an Academic Language in Finland

Ever since the 17<sup>th</sup> century when the first Finnish doctoral thesis was published in Latin, scientific texts in Finland have been written in various languages. Finnish as a language of science is relatively young, and in the past Latin, Swedish, and German took turns as the dominant language of science in Finland (Tommila 2001; Väyrynen 2006: 31–32). However, in the 20<sup>th</sup> century the dominance of German changed into the dominance of English in almost every branch of science. One reason for this is terminological: English terms are regarded as the international standard in many fields of study. In addition, science is more internationalised than ever before, and English has become its *lingua franca*. (Väyrynen 2006: 32.) Already in the late 1980s, over 80 per cent of scientific papers worldwide were written in English (Sajavaara 1989: 83). In Finland the number was 30-35 per cent, and it has been growing ever since (Tommila 2002: 587). Furthermore, English, instead of Finnish or Swedish, is often used even at Nordic conferences and, for example, when communicating with the Estonians (Väyrynen 2006: 32).

The prevalence of English as an international language also reflects the dominance of British and American cultures during the past two centuries. There are two main reasons for this development: firstly, the power of British colonialism in the 19<sup>th</sup> century and secondly, the economic power of the United States in the 20<sup>th</sup> century (Crystal 1997: 53; Sajavaara 1989: 83).

The dominance of English has raised a great deal of discussion inside the academia, and it has been noted that the supremacy of English may cause problems. It may lead, for example, to studies written in imperfect English which, in result, are difficult to follow. (Väyrynen 2006: 32.) A more serious problem is that, while English becomes more and more popular, other languages are ignored and left unused. As a result, learning the

concepts in one's mother tongue may become difficult, and national culture becomes narrow. (Väyrynen 2006: 32.) It has also been pointed out that internationality and English are not synonyms (cf. Hiidenmaa 2006: 35; Oittinen 2006: 45); also other languages than English can be used in international communication. It should also be noted that research and internationalisation are not the only duties of Finnish universities; they should also teach interaction both in foreign languages and especially in one's mother tongue (Hiidenmaa 2006: 35; Markkanen 2006: 37).

English has an important role also in the Academy of Finland. The president of the Academy, Raimo Väyrynen, states that most of the applications for the Academy are written in some other language than Finnish, usually in English. This is because the Academy often uses international specialists to evaluate the research applications. He goes on to say that this, because of the varying language skills of the applicants, may put them in an unequal position but, on the other hand, nowadays good and wide language skills are necessary for a researcher. (Väyrynen 2006: 33.)

English is an important and widely used language in all Finnish universities, which can be seen, for example, in the number of doctoral theses and other academic publications written in English. In 2007 as much as 80 per cent of the doctoral theses published in Finnish universities were written in English (Hämäläinen 2008: 34). The situation is similar also at the University of Vaasa: over 60 per cent of the publications in the publication series of the University of Vaasa, Acta Wasaensia, were written in English between 1971 and June 2006. The series publishes doctoral theses and studies aimed at an international audience. 124 of the 172 publications are doctoral theses and over 50 per cent of them were written in English. (Vaasan yliopisto 2005a, 2006a, 2007.). In 2006 there were 16 doctoral theses written at the University of Vaasa of which nine (56%) were written in English, five in Finnish, and two in Swedish (Vaasan yliopisto 2006e). In the academic context English is superseding other languages, even Finnish, and has, in fact, done that already.

In some fields of study English is becoming the only language of communication. For example, in medicine, science, and technology the majority of doctoral theses published

in Finland are written in English. In many Finnish universities researchers are recommended, or even pressured, to write their doctoral theses in English. The reason for this is internationalisation. (Hämäläinen & Liiten 2008: A3.) Furthermore, at the University of Helsinki the majority of the set books presented in the study guides were English in five faculties out of six. Only in the faculty of law Finnish set books were more common than English ones. In the faculties of humanities and medicine English set books were most common. (Hiidenmaa 2003: 79–80.) An important part of the academic context and context for language of science are also postgraduate studies which are discussed in the following section.

## 2.2 Postgraduate Studies and Doctoral Theses in Finland

A doctoral degree is the highest academic degree one can complete, and a doctoral thesis is written as part of it. To complete a doctoral degree takes several years of studying. The number of doctoral theses written in Finland has grown during the last two decades, and during the 1990s it has doubled. According to the preliminary data, more doctoral theses than ever before were written at Finnish universities in 2007. The number was 1 515, which is about a hundred more than in the previous year. In the early 1980s, people with a doctoral degree were rare, and at that time approximately 300 doctoral theses were written in Finland each year. Also at the University of Vaasa the number of doctoral theses written has grown since the early 1980s: in 1981 only one doctoral thesis was written at the University of Vaasa, whereas in 2007 the number was 15. (Opetusministeriö 2006; Hämäläinen 2008: 31; Liiten 2008: A4.)

Doctoral theses can be written in various languages in Finland, but the topic of a thesis affects the language choice the most. The first doctoral theses written in Finnish were published in the 1850s, and the first Finnish doctoral thesis written in English in 1889. (Väyrynen 2006: 31–32.) Already in the 18<sup>th</sup> century the topic of a doctoral thesis affected the choice of the language in which the thesis should be written. In general, doctoral theses concerning practical topics were written in Swedish, whereas theoretical doctoral theses were usually written in Latin. The first Swedish doctoral thesis in

Finland was presented in Turku in 1749, and during the following three decades a large number of doctoral theses in Finland were written in Swedish. For example, from 1770 to 1779 26 per cent of the doctoral theses published in Finland were written in Swedish. However, in the early 1780s the number of Swedish doctoral theses came down when Latin was again seen as the undisputed main language of science. (Tommila 2001.)

University of Vaasa provides postgraduate studies in four faculties and in many disciplines. Ultimately postgraduate studies lead to a doctoral degree, but it is also possible to complete a licentiate degree first. In postgraduate studies the student explores in depth their field of study, shows independent and critical thinking in their research field, and achieves the ability to independently create new scientific information. The requirement for the admission to postgraduate studies is a master's degree or equivalent. (Hallintotieteiden tiedekunnan jatkokoulutusopas 2005–2006 ja 2006–2007 [Faculty of public administration postgraduate studies study guide 2005–2006 and 2006–2007] 2007; Humanistisen tiedekunnan jatkokoulutusopas 2005–2007 [Faculty of humanities postgraduate studies study guide 2005–2007] 2007; Vaasan yliopisto 2004, 2005b.)

In order to achieve a doctoral degree, the student must complete the postgraduate course work and write and publicly defend a doctoral thesis. In the majority of disciplines, postgraduate studies include set books. In Marketing, nearly 70 per cent of the set books of postgraduate studies are in English. In Computer Science the number is 60 per cent and in Regional Studies 50 per cent. Postgraduate studies in Modern Finnish do not include any set books but the required literature is decided individually with every student according to their research. (Hallintotieteiden tiedekunnan jatkokoulutusopas 2005–2006 ja 2006–2007 [Faculty of public administration postgraduate studies study guide 2005–2006 and 2006–2007] 2007; Humanistisen tiedekunnan jatkokoulutusopas 2005–2007 [Faculty of humanities postgraduate studies study guide 2005–2007] 2007; Vaasan yliopisto 2004, 2005b.)

The high percentages of English set books in postgraduate studies in the above mentioned disciplines shows how important English is in academic world. Already in the Master Studies, all four disciplines include English set books. In the Master Studies in Computer Science, 19 courses out of 46 include English set books, while one course is given entirely in English. Since it is possible for both economics and engineering students to earn a Master's Degree in Computer Science, the extent to which English is used and encountered by the students varies. In general, the studies of economics students include more English set books than the studies of engineering students. (Vaasan yliopisto 2006b, 2006c, 2006d). Also in the Master Studies in Marketing, one course out of 15 is given in English, and 11 courses include English set books. In addition, Marketing students study the common Master Studies of the Faculty of Business of which 11 courses out of 30 include English set books. If one chooses to study International Marketing, the studies consist of 10 courses in English and one in Finnish with English set books. (Kauppatieteellinen tiedekunta. Opinto-opas 2006-2007 [Faculty of business. Study guide 2006-2007].) The Master Studies in Regional Studies do not include any courses in English, but 10 courses out of 22 include English set books (Hallintotieteellinen tiedekunta. Opinto-opas 2006–2007 [Faculty of public administration. Study guide 2006–2007]). As can be expected, the Master Studies in Modern Finnish do not include any courses in English but as many as six courses from the total of 65 include English set books (Humanistinen tiedekunta. Opinto-opas 2006– 2007 [Faculty of humanities. Study guide 2006–2007]). In addition, the general studies of every field at the University of Vaasa include studies of foreign languages. Majority of students studying for a Master's Degree choose to study English to some extent at some point in their studies.

The influence of English set books and courses both in master studies and postgraduate studies can be seen in the works cited lists of master's and doctoral theses. Niemi (2007: 26–27) studied the works cited lists of five master's theses from five disciplines and found that in Computer Science and International Marketing theses the works cited included more English than Finnish sources. In Modern Finnish theses, however, over 90 per cent of the works cited were in Finnish (ibid. 27). The analysis of the sources in the material of this study gives similar findings: English sources constitute the majority in the doctoral theses in Marketing (77 %) and Computer Science (52 %). In the

Regional Studies thesis English sources are a minority (42 %), as well as in the Modern Finnish thesis (16 %) where the majority of the works cited are in Finnish.

In order to be published, a doctoral thesis has to have certain scientific value and, thus, creating new scientific information is the primary goal of a doctoral thesis. Unlike after writing a master's thesis, a student is not required to write a maturity exam after writing a doctoral thesis. A maturity exam tests the student's skills in their mother tongue as well as knowledge on their research topic. A doctoral thesis can also be written in various languages, as has been mentioned earlier, and thus, it is not necessary to test the writer's skills in their mother tongue after writing a doctoral thesis.

The language in doctoral theses has to follow the conventions of academic language, which during the past few decades has been highly influenced by English. Thus, in an academic context, there are usually at least two languages present, one of which is typically English. Sometimes these two languages are used in the same context, for example, lecture, speech, or text. This results in code-switching, which is the topic of the following chapter.

#### 3 CODE-SWITCHING

In code-switching situations there are always at least two languages present. Code-switching has been defined, for example, as "the use of more than one language in the course of a single communicative episode" (Heller qtd in Halmari 1997: 1). According to Myers-Scotton (1993: 2), code-switching may help in planning sentences because one can use the resources of several languages. Most code-switching studies have, however, focused on spoken language, which has affected the way the phenomenon has been defined. The findings therefore also concern spoken language. In a code-switching context the term code refers to a language or a variety of language, and it is used because of its neutrality (Wardhaugh 1986: 86).

### 3.1 Code-switching, Borrowing, and Transfer

Code-switching has been distinguished from many other contact phenomena, that is, for example, borrowing, loans, and transfer. Code-switching and borrowing have been compared in several studies. Some see code-switching and borrowing as different but still part of the same phenomenon, whereas others would like to separate the two completely (Kovács 2001: 63). Myers-Scotton (1993: 163) argues that the two phenomena "are part of the same developmental continuum" and thus related. However, she suggests frequency and predictability as criteria for the distinction between code-switching and borrowing. Borrowings show high frequency, while code-switches occur rarely. Another characteristic of code-switches is the lack of predictability. (Ibid. 207.) Furthermore, a third category in between code-switches and borrowings has been introduced, namely nonce borrowings. They are "one-word items accidentally borrowed into the speech" and thus different from established loans. (Kovács 2001: 63.)

Transfer, another contact phenomenon, typically is the use of foreign words in communication. Code-switching and transfer differ from each other with respect to the neutrality of "the negotiated language-of-interaction" (Auer 1984: 29). This means that

as a result of code-switching, other parties may switch languages as well, whereas with transfer it rarely happens. Thus, code-switching usually involves more foreign language usage than transfer. Another difference is that while "transfer marks items, code-switching marks points" (Auer 1984: 29). However, both code-switching and transfer are part of the same phenomenon, namely language alternation. (Auer 1984: 7, 29.) Also code-alternation is used "as a cover term, i.e. hyperonym for code-switching and transfer" (Auer 1995: 116). For the present study the distinction between code-switching, borrowing, and transfer is to some extent relevant, as borrowings are excluded from this study. As a result, code-switching is used as a hyperonym for the two remaining phenomena. This means that the data is not divided into code-switches and transfers but the two phenomena are both treated as code-switches.

### 3.2 Structure of Code-switching

From the point of view of the syntax, there are, according to Myers-Scotton (1993: 3), two kinds of code-switching: intersentential and intrasentential. She states that "[i]ntersentential CS involves switches from one language to the other between sentences: a whole sentence (or more than one sentence) is produced entirely in one language before there is a switch to the other language(s) in use in the conversation" (ibid. 3–4). She continues that "[i]ntrasentential switches occur within the same sentence or sentence fragment" (ibid. 4). The material of this study includes both interand intrasentential code-switches which are analysed according to Myers-Scotton's MLF Model.

According to Myers-Scotton (1993: 6), the language that plays the dominant role in sentences showing code-switching is the Matrix Language (ML). This is the "base language" whose grammar "sets the morphosyntactic frame" for constituents containing elements from the matrix language in code-switching situations, that is matrix language islands and matrix language + embedded language constituents (ibid. 6, 20). In this study Finnish is the matrix language while English is the embedded language. Example

- (2) illustrates this situation, where two English terms appear in an otherwise Finnish text.
- (2) Biologista psykiatriaa on sanottu "mielettömäksi" (*mindless brain*) ja psykodynaamista psykiatriaa "aivottomaksi" (*brainless mind*). (Kapiala 2003: 58–59).

Biologic psychiatry has been called "mindless" (mindless brain) and psychodynamic psychiatry "brainless" (brainless mind).

The above model, the Matrix Language-Frame (MLF) Model, was originally developed for analysing intrasentential code-switching. It distinguishes three types of constituents:

1. ML + EL constituents, 2. ML islands, and 3. EL islands. ML + EL constituents include morphemes from at least two languages participating in code-switching, whereas ML islands are entirely in the ML and EL islands entirely in the EL. (Myers-Scotton 1993: 5–6.) The interest in the present study of Anglicisms is on the two structures of matrix language + embedded language constituents and embedded language islands, that is constituents that mix Finnish and English as well as English islands, respectively. Matrix language islands, that is Finnish islands, are not relevant as they are not Anglicisms.

In her study on Anglicisms in Finnish master's theses in a number of disciplines, Niemi (2007: 14–15, 17) has further identified four subcategories for ML + EL constituents. They are single EL lexemes, ML + EL compounds, assimilated ML + EL compounds, and ML + EL tables and figures. EL islands are divided into three subcategories: single and multiple-word EL islands, typographically separated EL islands, and EL island quotations, tables and figures. (Niemi 2007: 14–15, 17.) The original MLF Model and Niemi's application of it form the basis of the structural analysis in this study.

### 3.3 Flagging

Foreign language elements in speech or writing can be highlighted in different ways. This is done to draw attention to the foreign element, for example, to make it more acceptable. In speech "flagged" switches are marked with some kind of determiner or hesitation, for example, pause or repetition (Poplack et al. 1990 qtd in Kovacs 2001: 190). In other words, flagged switches are made to stand out from the matrix language. Although flagging has been studied mostly in speech, Weinreich (1968), for example, discusses marking of foreign expressions in writing as well. He states that:

If he [sic] [the ideal bilingual] does include expressions from another language, he may mark them off explicitly as "quotations" by quotation marks in writing and by special voice modifications (slight pause, change in tempo, and the like) in speech. (Weinreich 1968: 73.)

Weinreich (1968: 73) continues that the manner of switching between languages or codes depends on the individual, as some can control it better, while others find it difficult to switch codes according to the norms.

In addition to highlighting foreign elements, flagging may also signal new information. Flagging of new information can be done, for example, with "determiner-like elements" (Kovács 2001: 69) that are often used in spoken language where they are, in fact, "overused" compared to written language. Thus, determiners do not necessarily signal code-switching but can be a sign of new information, in which case flagging also occurs (ibid. 150). For example, Budzak-Jones (1998) found in her study that "Ukrainian-English switched words" were flagged as often as "purely Ukrainian words" (qtd in Kovács 2001: 69). It has also been argued that "[...] determiner-like elements often precede new information in spoken Finnish, especially in dialects" (Rapola 1954, Helasvuo 1988 and Vilkuna 1992 qtd in Kovács 2001: 146). This is done in order to make the following expressions, for instance, smoother (Kovács 2001: 146). In addition, Poplack et al. (1990 qtd in Kovacs 2001: 190) state "[...] that using determiner-elements is typical of Finnish-English code-switching".

Poplack et al. and Kovács associate flagging with spoken language but Weinreich discusses marking foreign expressions in writing as well. Since this study examines written language, determiners or hesitations mentioned by Poplack et al. as signs of flagging are not likely here. Instead, flagging in this thesis consists of typographical

devices. These devices include the use of quotation marks (according to Weinreich) but also the use of italics, parentheses, and few other special markers. Example (3) illustrates the use of parentheses as a flagging device.

(3) Toisaalta päästään pohtimaan uudelta pohjalta "vapauttavan" (*emansipatory/empowering*) poliittisen toiminnan mahdollisuuksia. (Rosenqvist 2004: 143.)

On the other hand, it is now possible to discuss the possibilities of "emansipatory" (*emansipatory/empowering*) political activity from a new angle.

In this example, the two Anglicisms have been flagged with two devices, that is with parentheses and italics. Thus, Anglicisms can also be flagged with several devices at the same time resulting in, for instance, double flagging. Flagging of Anglicisms is discussed more in Chapter 4.3.

## 3.4 Functions of Code-switching

People can switch languages for a number of reasons. Several researchers have studied the functions of code-switching mainly in spoken language and presented overlapping results. According to Wardhaugh (1986: 102), when a code equals language, two kinds of code-switching can be distinguished. Situational code-switching occurs when the conversants change the languages they use according to the situations they are in. Metaphorical code-switching occurs when a change of topic changes also the language used. (Ibid. 86, 102–103). The participants present and their linguistic knowledge play an important role in situational code-switching. For instance, one may want to switch codes to greet someone or to give speakers of other languages a possibility to take part in conversation. Metaphorical code-switching, however, is explained by that people prefer to discuss certain topics in certain languages. Furthermore, code-switching can be used to create a certain effect or form instead of spreading information or content. For example, the purpose of switching codes, or using two codes, may be to produce a dramatic effect or variation, for instance to create a provocative or amusing result. (Kelly-Holmes 2005: 10–11.)

Although functions of code-switching in spoken language have been covered in many studies, it has not been studied much in written language. An exception is, for example, Jonsson's (2005) study on code-switching in Chicano theatre writing, where she focused mainly on artistic and stylistic functions of code-switching. For the present study, a relevant categorisation of the functions of code-switching comes from studies of spoken language. Overlapping with situational and metaphorical code-switching, Grosjean (1982: 152) has presented the following ten reasons for code-switching in spoken language:

- Fill a linguistic need for lexical item, set phrase, discourse marker, or sentence filler
- Continue the last language used (triggering)
- Quote someone
- Specify addressee
- Qualify message: amplify or emphasize ("topper" in argument)
- Specify speaker involvement (personalize message)
- Mark and emphasize group identity (solidarity)
- Convey confidentiality, anger, annoyance
- Exclude someone from conversation
- Change role of speaker: raise status, add authority, show expertise

In the present thesis the functions of code-switching are discussed based on Grosjean's reasons for the phenomenon. Although these reasons are related to spoken language, and code-switching can serve different functions in spoken and written language, seven of the reasons presented in the above categorisation are relevant in this study. The reasons are: fill a linguistic need for a lexical item, set phrase, discourse marker, or sentence filler; quote someone; specify addressee; qualify message, i.e. amplify or emphasize; mark and emphasize group identity; exclude someone from conversation; and change role of speaker, i.e. show expertise. The function of filling a linguistic need for a lexical item is identified when an Anglicism is used instead of a Finnish equivalent, as in "case-menetelmä" (case method) (Jousranta 2005: 107). The function of quoting someone is identified when there is a direct quote in English in Finnish text.

A direct quote is identified when quotation marks are used, but also the context has to be taken into account, as quotation marks can also relate to flagging. The function of qualifying message, i.e. amplifying or emphasizing, is identified when an Anglicism is used in addition to a Finnish term or expression, as in "maaseutualue (*rural place*)" (Rosenqvist 2004: 96).

The functions of specifying addressee, marking and emphasizing group identity, excluding someone from conversation, and changing role of speaker, i.e. showing expertise, are more difficult to identify than the other functions. However, they can be identified, for example, when an English term specific to a certain field of study is used. This can be identified as specifying addressee, i.e. other people in the same field of study, marking and emphasizing group identity within the same field, and showing expertise in the field of study. The function of excluding someone from conversation is identified when a direct quote in English appears in the text, because a person who does not know English is automatically excluded. Furthermore, it can be seen that all Anglicisms serve the function of excluding someone from conversation because they are entirely or partly in English. However, in this study this is not taken for granted but every case where Anglicisms are used are evaluated separately. Thus, depending on the context, readers are not excluded in every case but of course it is difficult for the reader to know that if they do not know what the Anglicisms mean. Functions of Anglicisms are discussed in more detail in Chapter 4.4.

### 3.5 Anglicisms as Code-switches

In language contact, two or more languages are used in interaction, and they can influence each other. In the modern world, English is the language that influences other languages the most. Henrik Gottlieb (2005: 163) has defined the term Anglicism as "any individual or systemic language feature adapted or adopted from English, or inspired or boosted by English models, used in intralingual communication in a language other than English". This definition, therefore, includes, for example, loan translations, hybrids, and pseudo-Anglicisms as well as overt and covert lexical

borrowings, such as "kompjuter" (computer) in Slovene and "elepé" (LP) in Spanish, respectively (Gottlieb 2005: 164). Thus, also code-switches, transfers, and borrowings are Anglicisms.

The interest in the present study is on orthographically English Anglicisms which means that the above definition as such is too broad. This means that adapted Anglicisms as well as Anglicisms "inspired or boosted by English models" (Gottlieb 2005: 163), such as borrowings adapted to Finnish orthography and calques, are excluded from this study. This is done because the scope of the study is limited and it would not be possible to study Anglicisms according to the broad definition in the scope of this study. However, pseudo-Anglicisms, that is compounds consisting of both English and Finnish words, are included.

In addition to borrowings, calques, and pseudo-Anglicisms, Anglicisms can also be, for example, abbreviations and acronyms (Sajavaara 1989: 86). For instance, the abbreviation "Mr" (mister) is widely used outside the English-speaking world, as is also the established acronym "UNESCO" (United Nations Educational, Scientific and Cultural Organization) (ibid. 86). In this study acronyms are included but abbreviations are not relevant.

#### 4 ANGLICISMS IN THE DOCTORAL THESES

The present study is interested in the extent of English influence on the Finnish of academic dissertations. The study focused on the use of Anglicisms in four doctoral theses written in Finnish. The material consisted of four doctoral theses from different disciplines at the University of Vaasa, namely one from Computer Studies, one from Marketing, one from Modern Finnish, and one from Regional Studies. The aim was to study the number, structure, and function as well as flagging of Anglicisms to determine whether there were differences between the disciplines.

The following discussion begins with the description of the structure of the Anglicisms as well as the quantities of Anglicisms in different categories. The structural analysis of the data relies on the Matrix Language-Frame (MLF) Model developed by Myers-Scotton (1993). The MLF Model categories applied in this study were 1. matrix language (ML) + embedded language (EL) constituents and 2. embedded language islands. The additional categories used in the analysis rely on the categorisation by Niemi (2007) in her MA thesis. Niemi (2007) divided ML + EL constituents further into four subcategories: single EL lexemes, ML + EL compounds, assimilated ML + EL compounds, and ML + EL tables and figures. EL islands were divided into three subcategories: single and multiple-word EL islands, typographically separated EL islands, and EL island quotations, tables and figures (Niemi 2007).

Niemi's method was not, however, used in this study as such but it was applied further. Two of the subcategories of ML + EL constituents, namely ML + EL compounds and ML + EL tables and figures, were included in this study, but single EL lexemes and assimilated ML + EL compounds were not found relevant. Furthermore, one new subcategory, i.e. EL acronyms and single words with ML case ending, was introduced. This category included both English acronyms and single words with Finnish case ending. In ML + EL compounds the EL lexeme usually acted as a modifier. "[M]ultipleword EL modifier + ML head" as well as "EL acronym modifier + ML head compounds" (Niemi 2007: 15) belonged to this category. ML + EL tables and figures

was a special category used by Niemi. One ML + EL table or figure equalled to one Anglicism despite the total number of Anglicisms in it. This practise was justified with the similar treatment of EL islands. (Niemi 207: 16.) With EL islands, one of the subcategories (typographically separated EL islands) was not found relevant, and the Anglicisms were divided into the two remaining subcategories (single and multipleword EL islands and EL island quotations, tables and figures). In this study, typographically separated Anglicisms are discussed below with flagging.

In the present study the focus was on Anglicisms that had retained their English orthographically as well as those that mixed Finnish and English. The Anglicisms found in the doctoral theses were diverse. They were single or multiple words, compounds, noun strings, clauses and sentences entirely in English or a mix of Finnish and English. Most of the Anglicisms found in the theses were intrasentential switches, i.e. they occurred within a sentence. Switches between sentences, i.e. intersentential switches, were a minority in the data although some EL islands occurred intersententially. These consisted of some multiple-word EL islands and EL quotations. The structural discussion is followed by the discussion of flagging of the Anglicisms, showing also the quantities of flagged Anglicisms. Finally, the functions of the Anglicisms are discussed.

There were altogether 382 Anglicisms in the doctoral theses, and approximately 0.35 Anglicisms per thesis per page. The number of Anglicisms in three of the four theses was surprisingly similar as the doctoral thesis in Modern Finnish was not expected to contain as many Anglicisms as the other three theses. However, the theses written in Computer Science, Marketing, and Modern Finnish all included a little over a hundred Anglicisms each. This study was not interested in how many different Anglicisms there were in the theses, which means that an Anglicism could occur in the theses more than once. Relatively, the majority of Anglicisms were in the doctoral theses written in Computer Science and Marketing which both included 0.43 Anglicisms per page (29 and 31 per cent of the total, respectively). The thesis written in Modern Finnish was significantly longer than the other theses and thus, although the numbers were similar in the three theses, the relative number of Anglicisms was lower than in Computer Science and Marketing, amounting to 0.29 Anglicisms per page (30 per cent of the total). The

thesis written in Regional Studies differed in the total number of Anglicisms significantly from the other three theses: it included only 39 Anglicisms altogether, but since it was the shortest of the theses, the relative number was not very much lower than the one in Modern Finnish, amounting to 0.23 Anglicisms per page (10 per cent of the total). The main findings are illustrated in Table 1.

**Table 1.** Anglicisms in the Theses by Field of Study.

Field of Study	Number/Thesis	Per Page	% of the Total Number of Anglicisms
Computer	110	0.43	29
Science			
Marketing	120	0.43	31
Modern Finnish	113	0.29	30
Regional Studies	39	0.23	10
All Theses	382	0.35	100

In the table the field of study of each thesis is shown on the left. The "Number/Thesis" column shows the number of Anglicisms in a thesis by field of study and the "Per Page" column the number of Anglicisms per page in each thesis. The "% of the Total Number of Anglicisms" column shows the percentage of all Anglicisms in a thesis. The total number of Anglicisms and the average number of Anglicisms per thesis per page are shown at the bottom of the table.

As was expected, Anglicisms were most common in the theses written in Computer Science and Marketing. These disciplines belong to the fields of technology and trade where English influence is strong and Anglicisms are frequently used in the language of the field of study. The thesis written in Modern Finnish contained more Anglicisms than expected, which could be explained by the fact that the topic of the thesis was related to medicine. In the field of medicine, English is an important language of communication and Anglicisms are part of the terminology. The fact that the thesis written in Regional Studies did not contain as many Anglicisms as the other three theses was not

unexpected, as in the field in question English influence is not yet as strong as in medicine, technology and trade.

Anglicisms in the data were divided into two main structural categories, namely embedded language islands and matrix language + embedded language constituents. The first category, EL islands, was divided into two subcategories, namely multipleword EL islands and EL quotations. The subcategories of the other main category, ML + EL constituents, were ML + EL compounds, ML + EL tables and figures, and English acronyms and single words with Finnish case ending. The majority of the Anglicisms (67 %) were EL islands, and more specifically single and multiple-word EL islands. This subcategory represented 58 per cent of all Anglicisms, thus forming by far the largest group of Anglicisms. Although ML + EL constituents were the minority (33 %), ML + EL compounds formed the second largest subcategory, representing 23 per cent of all Anglicisms. The three other subcategories were significantly smaller, representing nine (EL quotations), seven (ML + EL tables and figures), and three (English acronyms and single words with Finnish case ending) per cent of the Anglicisms.

The majority of the Anglicisms in the theses (65 %) were flagged, i.e. highlighted in some way. In the theses written in Marketing, Modern Finnish and Regional Studies at least 74 per cent of the Anglicisms were flagged. Only in the thesis written in Computer Science flagging was significantly rarer, representing only 18 per cent of the Anglicisms. The fact that flagging was so rare in Computer Science suggests that in the field in question English elements are more acceptable than in the other fields included in this study. In the following chapters the findings are discussed in the above order, i.e. starting from the different structural categories and then moving on to flagging and functions of code-switching.

## 4.1 Embedded Language Islands

In the data, embedded language islands, i.e. Anglicisms entirely in English, were significantly more common than Anglicisms including both matrix (Finnish) and

embedded language (English). EL island Anglicisms, such as "business intelligence" (Humala 2004: 20), represented 67 per cent of all Anglicisms with 260 instances, whereas ML + EL constituents, such as "referee-menettely" (referee procedure) (Rosenqvist 2004: 3), formed 33 per cent of the total with 122 instances. In the material of this study embedded language islands were single words, such as "rurality" (ibid. 95), compounds, such as "neuro-linguistic" (Kapiala 2003: 24), and multiple-word expressions, such as "co-operative interorganisational relationships" (Humala 2004: 61). EL islands included also clauses, sentences, islands consisting of several sentences, and quotations entirely in English.

EL islands were proportionally the most common in the Modern Finnish thesis where they represented 90 per cent of all Anglicisms. In the Marketing thesis they were almost as common, representing 84 per cent of Anglicisms. In the Regional Studies thesis EL islands also formed the majority (67 %), but in the thesis written in Computer Science they represented the minority (28 %). The main findings on EL islands in the theses are illustrated in Table 2.

**Table 2.** EL Islands in the Theses.

Field of Study	Number/Thesis	% of the Total Number of Anglicisms
Computer	31	28
Science		
Marketing	101	84
Modern Finnish	102	90
Regional Studies	26	67
All Theses	260	68

In the table the "% of the Total Number of Anglicisms" column shows the percentage of Anglicisms in this category in each of the theses by the field of study of the thesis. The total number of Anglicisms in this category and their percentage of the total are shown at the bottom of the table.

Surprisingly, the highest number of EL islands was in the thesis written in Modern Finnish. This was unexpected, as the thesis in general was not expected to contain many Anglicisms. The result is, however, explained by the fact that most of the EL islands in the thesis were related to medical terminology and language, which was the topic of the thesis. An EL island used in the thesis and related to medical language is, for example, "therapeutic milieu" (Kapiala 2003: 115). The thesis written in Marketing included the second most EL islands. This was not unexpected, as it is a field of study related to trade and contains a great deal of English terminology. An example of an EL island term used in the thesis is "market intelligence" (Humala 2004: 30). Also in the thesis written in Regional Studies, EL islands were the majority. This thesis included the longest EL islands in this study, consisting of several sentences in English, but typically they were shorter instances, such as "hedonist discourse" (Rosengvist 2004: 99). The thesis written in Computer Science contained a surprisingly low number of EL islands. As English influence is strong in the field of technology, it was expected that the thesis in question contain a high number of terms in English, i.e. EL islands. These, however, constituted the minority of Anglicisms in the thesis, and typically they were multipleword expressions, for example "axial coding" (Jousranta 2005: 74).

The EL islands in the theses were typically single and multiple-word EL islands (58 %). Their number was highest in the Marketing thesis where they formed 83 per cent of Anglicisms. Similarly, in the Modern Finnish thesis single and multiple-word EL islands formed the majority, representing 79 per cent of Anglicisms. In the Regional Studies thesis single and multiple-word EL islands were also common (52 %), but in the Computer Science thesis they represented only 19 per cent of Anglicisms.

In the thesis written in Modern Finnish, single and multiple-word EL islands typically consisted of one or two words and were related to medical language, such as "insanity" (Kapiala 2003: 114). Also in Marketing, most single and multiple-word EL islands consisted of one or two words and were terms used in the field of trade, such as "economy" (Humala 2004: 31). In the thesis written in Regional Studies, single and multiple-word EL islands were of various lengths and one-word EL islands were not as common as in the two above mentioned theses. An example of an Anglicism belonging

to the subcategory of single and multiple-word EL islands that was used in the thesis is "signification = meaning of rurality" (Rosenqvist 2004: 96). In the Computer Science thesis, single and multiple-word EL islands typically consisted of two English words that formed a field-specific term, such as "open coding" (Jousranta 2005: 73).

In addition to single and multiple-word EL islands, the theses included also some EL quotations. They were direct quotations in English, and typically they consisted of a clause or sentence but some included several sentences. EL quotations were also single and multiple-word expressions. An example of an EL quotation is shown in example (4) below.

# (4) "They just come in and after a number of years we see some of them graduating". (Jousranta 2005: 24.)

Although EL quotations were quite rare, representing nine per cent of all Anglicisms, they clearly formed a category of their own among EL islands and Anglicisms in general. Each of the theses included at least one EL quotation but none included more than 12. Similarly, the percentage of EL quotations in the theses varied from one to 15 per cent. The thesis written in Regional Studies included the highest number of EL quotations (15 %), which can be seen surprising, as according to the writing instructions of the Faculty of Public Administration, quoting text in a foreign language should be avoided (Hallintotieteellisten töiden laadintaohjeet 2007–2008 [Writing instructions for works of the faculty of public administration 2007–2008] 2007). In the thesis written in Modern Finnish, EL quotations represented 11 per cent of Anglicisms, followed by Computer Science (9 %) and Marketing (1 %). Thus, in respect to the frequency of EL quotations, the thesis written in Marketing was an exception.

## 4.2 ML + EL Constituents

While embedded language islands, i.e. Anglicisms entirely in English, formed the majority of Anglicisms in the data, Anglicisms including both matrix (Finnish) and

embedded language (English) were less common. Anglicisms including both Finnish and English, i.e. ML + EL constituents, were typically compounds including Finnish and English elements (representing 23 per cent of all Anglicisms and 70 per cent of all ML + EL constituents), such as "win-win -tilanne" (Humala 2004: 54). ML + EL constituents were also English acronyms or single words with Finnish case ending, such as "BI:tä<sup>7</sup>" (BI, partitive) (Humala 2004: 20) and "brandiin" (to brand) (ibid. 147), respectively. Some ML + EL constituents were also tables and figures including both Finnish and English.

Although ML + EL constituents were not as common as EL islands in the theses, they formed the majority of Anglicisms in one thesis. In the thesis written in Computer Science, ML + EL constituents represented 72 per cent of all Anglicisms. In the three other theses ML + EL constituents were significantly rarer, representing 33 per cent of Anglicisms in the Regional Studies thesis, 16 per cent in the Marketing thesis, and 10 per cent in the Modern Finnish thesis. The main findings on ML + EL constituents are illustrated in Table 2.

**Table 3.** ML + EL Constituents in the Theses.

Field of Study	Number/Thesis	% of the Total Number of Anglicisms
Computer	79	72
Science		
Marketing	19	16
Modern Finnish	11	10
Regional Studies	13	33
All Theses	122	32

The fact that ML + EL constituents were the majority in the thesis written in Computer Science suggests that in the field of study in question it is acceptable to combine Finnish and English elements. A very typical ML + EL constituent in the thesis consisted of an

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<sup>&</sup>lt;sup>7</sup> BI comes from business intelligence (Humala 2004: 20).

English acronym and a Finnish word, such as "ICT-ala" (ICT field) (Jousranta 2005: 11). The second most ML + EL constituents were in the thesis written in Regional Studies, although they formed the minority of all Anglicisms in the thesis. Anglicisms belonging to the subcategories of ML + EL compounds and ML + EL tables and figures were equally common in the thesis. This suggests that in the field of Regional Studies it is to some extent acceptable to combine Finnish and English both in words and in tables and figures. An instance of an ML + EL constituent in the Regional Studies thesis was, for example, "high-tech -maatalous" (high-tech agriculture) (Rosenqvist 2004: 99). In the Marketing thesis, ML + EL constituents were rarer than in Regional Studies which was unexpected because of the strong English influence in the field. Due to this, it was expected that Finnish and English elements were combined more in the thesis. Most of the ML + EL constituents in the Marketing thesis were ML + EL compounds, such as "middle-range -malli" (middle-range model) (Humala 2004: 231). As expected, ML + EL constituents were rare in the thesis written in Modern Finnish. This suggests that in that field of study it is not acceptable to combine Finnish and English elements. Also, as Modern Finnish is a linguistic field, one has to pay special attention to the norms of language when using two languages simultaneously. Most ML + EL constituents in this thesis were ML + EL tables and figures (five instances), and ML + EL compounds were not as common as in the other three thesis.

The majority of the ML + EL constituents in the theses were ML + EL compounds, representing 23 per cent of all Anglicisms. All ML + EL compounds consisted of an English modifier and a Finnish head. The modifiers were either single or multiple words, as in "referee-menettelyn" (referee procedure) (Rosenqvist 2004: 3, 15) and "business-to-business -ydinsuhteen" (business to business core relationship) (Humala 2004: 10), respectively, or acronyms, as in "IT -teollisuus" [sic] (IT industry) (Jousranta 2005: 23). There were no cases with an Anglicism head and a Finnish modifier.

<sup>8</sup> ICT comes from Information and Communication Technology (Jousranta 2005: 38).

<sup>&</sup>lt;sup>9</sup> IT comes from Information Technology (Jousranta 2005: 38).

ML + EL compounds were most common in the thesis written in Computer Science where they represented 68 per cent of Anglicisms. Typically the compounds consisted of an English acronym modifier and a Finnish head, such as "IT-kupla" (Jousranta 2005: 26, 47). Most common acronym modifiers in the thesis were IT and ICT. In fact, all ML + EL compounds consisting of an English acronym and a Finnish head in the data were in the thesis written in Computer Science. In the three other theses ML + EL compounds were significantly rarer, representing 15 per cent of Anglicisms in the Regional Studies thesis and seven per cent in the Marketing thesis. In the thesis written in Modern Finnish, ML + EL compounds were very infrequent, representing only two per cent of Anglicisms. In these three theses all ML + EL compounds consisted of single or multiple-words in English and in Finnish, such as "Leader/Pomo toimintaryhmä" (Leader/Boss operational group) (Rosenqvist 2004: 136). Thus, no English acronyms were used in ML + EL compounds in the theses written in Regional Studies, Marketing, and Modern Finnish. This suggests that English acronyms are not common in the language of these fields, whereas in Computer Science they are an important part of the terminology. The thesis written in Modern Finnish was an exception among the theses in terms of ML + EL compounds, as there were only few of those in the thesis. They were related to medical terminology, more specifically psychiatry, and an example of such case is "mind-body -ongelma" (mind-body problem) (Kapiala 2003: 58). The rarity of ML + EL compounds in the thesis written in Modern Finnish suggests that it is not acceptable to combine English and Finnish elements to produce mixed compounds in this linguistic field.

ML + EL constituents included also tables and figures that contained both Finnish and English. ML + EL tables and figures formed only seven per cent of all Anglicisms, but since they differ significantly from the other ML + EL constituents they were analysed as a separate category. Also appendices including Finnish and English belong to this category. The highest percentage of ML + EL tables and figures were in the thesis written in Regional Studies, where they represented 15 per cent of Anglicisms. The thesis included six ML + EL tables and figures in which the headings and the titles were both in Finnish and English. Statistics Finland was the source of five of these tables and figures, which means that if one wants to use the original tables and figures, it is

impossible to avoid foreign elements, in this case Anglicisms. The tables and figures of Statistics Finland were thus quotations, but since a category for ML + EL quotations was not included in this study, the tables and figures of Statistics Finland were included in the category of ML + EL tables and figures. The thesis written in Marketing had the second highest percentage of ML + EL tables and figures, although the percentage was significantly lower than in Regional Studies, representing only seven per cent of Anglicisms in the thesis. In the two other theses, ML + EL tables and figures were even rarer, representing four per cent of Anglicisms in the thesis written in Modern Finnish and only two per cent in the Computer Science thesis. The low figures could be explained mainly with the fact that one whole ML + EL table or figure was counted as one Anglicism even if the ML + EL table or figure contained more than one Anglicism. In addition, the theses included tables and figures that did not contain any English but were entirely in the matrix language, i.e. Finnish, and thus were not relevant for this study. For example, in the thesis written in Computer Science all tables and figures were entirely in Finnish and only two appendices included English, which were included in the category of ML + EL tables and figures.

The third subcategory of ML + EL constituents was English acronyms and single words with Finnish case ending, for example "NLP:n<sup>10</sup>" (NLP's) (Kapiala 2003: 24, 277) and "brandiin" (to brand) (Humala 2004: 147), respectively. An instance of the word "dotcomit" (dot coms) (Jousranta 2005: 116) was also included in this category as opposed to the special case of the word "laiffii" (life<sup>11</sup>) (ibid. 189) which was excluded from the study because it is not orthographically English. In one case an English word had been combined with a Finnish superlative ending to produce a mixed superlative "hypeimmät" (the most hyped up) (Jousranta 116), which was included in this category because of its English orthography. The last example appeared in one of the IT students' answers to a questionnaire aimed at them and is thus a quotation, but since a subcategory for ML + EL quotations was not included in this study, the example is included in the category of EL acronyms and single words with Finnish case ending.

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<sup>&</sup>lt;sup>10</sup> NLP comes from neuro-linguistic programming (Kapiala 2003: 18).

<sup>&</sup>lt;sup>11</sup> Partitive from the word "life" written 'in Finnish' as it is pronounced.

The category of EL acronyms and single words with Finnish case ending formed only three per cent of the total number of Anglicisms, thus being the smallest group of ML + EL constituents, and the smallest subcategory, in this study. The percentages of Anglicisms in this category were similar in all four theses and they varied from two to four per cent. In the thesis written in Regional Studies there was only one instance of an English word with a Finnish case ending, namely "cowboytkin" (also cowboys) (Rosenqvist 2004: 155), which represented three per cent of Anglicisms in the thesis. In the Computer Science thesis, all three instances of English words with a Finnish case ending were quoted from one IT student's answers to a questionnaire aimed at them. The instances were "hypeä" (hype), "hypeimmät" (the most hyped up), and "dotcomit" (dot coms) (Jousranta 2005: 116). All these instances are colloquial, and since they appeared in the answers of one student, it is unlikely that they are commonly used in the academic language of the field. The three instances represented two per cent of all Anglicisms in the thesis. In the theses written in Modern Finnish, EL acronyms and single words with Finnish case ending were slightly more common than in Computer Science and Regional Studies, representing four per cent of Anglicisms in the thesis. In the Marketing thesis, Anglicisms of this subcategory were rare, representing only two per cent of all Anglicisms in the thesis. In both of the above mentioned theses, Finnish case endings were attached to acronyms as well as single English words. In the thesis written in Modern Finnish, Anglicisms of this category included both medical terms, for example "NLP:n" (NLP's) (Kapiala 2003: 24, 277), and words in everyday language, such as "collegeiden" (colleges') (ibid. 78). In the Marketing thesis, EL acronyms and single words with Finnish case ending were related to the language of the field, for example "BI:tä" (BI, partitive) (Humala 2004: 20) and "partnerit" (partners) (ibid. 173).

Compared to Niemi's (2007) findings on MA and MSc theses, EL islands were nearly twice as common in the material of this study. In her study they constituted only 37 per cent of the Anglicisms, while in the present study the percentage was 67. Thus, in Niemi's study, ML + EL constituents formed the majority with 63 per cent, whereas in this study they were the minority with 33 per cent. The biggest subcategory in this study was single and multiple-word EL islands (58 %), whereas in Niemi's study it was ML + EL compounds (38 %), which was the second biggest subcategory (23 %) in this study.

In Niemi's study, single and multiple-word EL islands were significantly rarer than in this study, representing only 10 per cent of all Anglicisms. ML + EL tables and figures were more common in this study than in that of Niemi, representing seven percent in the former and three in the latter. The percentage of EL quotations was exactly the same (9) %) in the material of this study than in that of Niemi (9 %), although in her study the category included also EL tables and figures which the material of this study did not include. According to these results, it is more common to combine Finnish and English elements in master's theses than in doctoral theses. One reason for this might be that the norms of language are not paid as much attention in master's theses as in doctoral theses, and mixing English and Finnish words is more acceptable in master's theses than in doctoral theses. The findings also suggest that English elements occur more frequently as islands in doctoral theses than in master's theses. This, on the other hand, suggests that English elements as such, without any Finnish elements attached to them, are more acceptable in doctoral theses than in master's theses. However, the methods used for the analysis in this study and the ones used by Niemi differ to some extent from each other and thus, the findings and different categories are not totally comparable. In what follows, flagging and functions of Anglicisms in the doctoral theses are discussed.

## 4.3 Flagging

Foreign language elements are occasionally highlighted to draw attention to the foreign element. Highlighting, or flagging, can be done in different ways but in writing only with typographical devices, i.e. with quotation marks, italics, parentheses, or other special markers. Flagging of Anglicisms in the doctoral theses of this study was done by various means, for example with the above mentioned markers. Also the phrase "niin sanottu" (so called) in example (5), or "ns." in short, was used to flag an Anglicism.

(5) Ensimmäistä lukuun ottamatta artikkelit ovat ennakkotarkastettuja eli *niin sanotun* **referee**-menettelyn läpi käyneitä. (Rosenqvist 2004: 15.)

All but the first article have been checked in advance, that is, they have been through the so-called *referee* procedure.

In this case, the Anglicism is first explained in Finnish, that is the articles are checked in advance, and only then the Anglicism is given after a special marker ("niin sanottu", so-called). In this way the use of the Anglicism is softened, and it does not come as a surprise to the reader. The use of flagging in this case may be due to the fact that the term is new and not well-known in the field.

Also the abbreviation "en" (indicating that the following term is in English) was used to flag Anglicisms, as in example (6). Occasionally, more than one typographical device was used, as example (6) shows.

(6) Potilasryhmällä on skandinaavisessa psykiatriassa keskeinen asema, mutta Norjassa heidän tilaansa on nimitetty *rakenteelliseksi psykoosiksi* (en *constitutional psychose* [sic]) ja Tanskassa *psykogeeniseksi psykoosiksi* (en *psychogenic psychose* [sic]). (Kapiala 2003: 258.)

The group of patients has a central position in Scandinavian psychiatry, but in Norway their condition has been named constitutional psychosis (in English constitutional psychose [sic]) and in Denmark psychogenic psychosis (in English psychogenic psychose [sic]).

In the above example flagging was used to draw attention to the English terms with the marker "en". By doing so, the writer most likely wanted to clearly point out that the terms are in English and not in Finnish, and they also separated the Anglicisms from the Finnish text with parentheses. The Anglicisms were also first given Finnish equivalents which helps to understand the foreign terms. Both typographical devises ("en" and parentheses) as well as the Finnish equivalents again soften the use of Anglicisms. However, it should be noted here that the writer has mistaken the two instances for terms entirely in English, although they are, in fact, mixed terms where the first word is an English one but the second, namely "psychose", is most likely Norwegian and/or Danish.

The most common device to flag Anglicisms in the theses was parentheses (231 instances). It was significantly more common than any other device, and it was used almost twice as many times as italics which was the second most common device with 121 instances. Example (7) illustrates the use of parentheses to flag Anglicisms.

(7) Sekä aineistolähtöinen (**grounded theory**) että tapaustutkimus (**case**) -metodi --. (Jousranta 2005:29.)

Both grounded theory (grounded theory) and case (case) method --.

In this example parentheses was used to separate the Anglicisms from the body text, which was a typical case in the doctoral theses. It was also typical, as in this example, to give the Finnish term first and after that the Anglicism in parentheses. Parentheses and italics were the main devices to flag Anglicisms in the theses, and they also occurred simultaneously resulting in double flagging, as in example (8).

(8) Biologista psykiatriaa on sanottu "mielettömäksi" (*mindless brain*) ja psykodynaamista psykiatriaa "aivottomaksi" (*brainless mind*). (Kapiala 2003: 58–59).

Biologic psychiatry has been called "mindless" (mindless brain) and psychodynamic psychiatry "brainless" (brainless mind).

In this case the Anglicisms were separated from the Finnish text with parentheses but they were also italicised to show that they are not Finnish elements. Also in this case the Anglicisms were first given Finnish equivalents after which the original English terms were introduced. Overall, it was typical that when an Anglicism was given in parentheses, the Finnish equivalent preceded it or the Anglicism was to some extent explained first. In this way the Anglicisms were given a gloss, i.e. a translation or an explanation in Finnish.

Double flagging, as in the above example, was typically created with parentheses and italics. Other ways to flag Anglicisms were significantly less common in the theses, and they included the abbreviation "en" (to indicate that the following term is in English; 16 instances) and the phrase "niin sanottu" (so called) or "ns." in short (five instances). Quotation marks were considered as flagging depending on the context in this study. The majority of quotation marks, however, were seen to relate to direct quotes and thus, they were not considered as flagging in these cases. However, if a direct quote was also, for example, italicised, italics were considered as flagging. As a result, there was only one instance where (double) quotation marks were considered as flagging, namely in

""redneck" - ym. energiaa" [sic] (redneck etc. energy) (Rosenqvist 2004: 105). There were no instances where single quotation marks were considered as flagging, as they all (four instances) were seen to relate to direct quotes.

In two of the theses (Computer Science and Marketing) parentheses was the most common device to indicate flagging, whereas in the other two (Modern Finnish and Regional Studies) it was italics. However, in the theses where italics was the most common device, parentheses was also used frequently and they were almost as common as italics. In contrast, in the theses where parentheses were most common, italics were used rarely or not at all. These theses were Computer Science and Marketing, and the absence of italics could be explained by the fact that the Anglicisms as such do not have to be emphasised, but only separated from the matrix language text, if necessary. In the doctoral theses in Modern Finnish and Regional Studies, however, parentheses were used to separate the Anglicisms from the matrix language text, but italics were used to highlight them.

Overall, there were 249 instances of flagged Anglicisms in the theses which represent 65 per cent of the total. Anglicisms were flagged most frequently in the thesis written in Modern Finnish where 90 per cent of the Anglicisms were flagged. In the Marketing and Regional Studies theses, flagging was almost as common with 81 per cent in the Marketing thesis and 74 per cent in the Regional Studies thesis. The thesis written in Computer Science was the only one with a clearly different result. In the thesis in question only 18 per cent of the Anglicisms were flagged. The main findings on flagging are illustrated in Table 3.

**Table 4.** Typographical Flagging in the Theses.

Field of Study	Number/Thesis	% of the Total
		Number of
		Anglicisms
Computer	20	18
Science		
Marketing	98	81
Modern Finnish	102	90
Regional Studies	29	74
All Theses	249	65

The fact that flagging was so common in the thesis written in Modern Finnish suggests that Anglicisms are not acceptable in that field of study. Thus, they have to be marked in some way or separated from the body text, or both, to clearly show that they are foreign elements. The frequency of flagging in the Modern Finnish thesis is probably related to the fact that the discipline belongs to the field of linguistics where the quality and norms of language have to be paid special attention. Also the topic of the thesis may have contributed to flagging, since it was related to medicine and a great deal of medical terminology in English was used in the thesis. Double flagging was also common in the thesis, as approximately 90 per cent of the flagged Anglicisms were flagged with two devices. Double flagging suggests that in this field of study Anglicisms have to be both separated from the body text and distinguished in some other way. There are no general rules on how to treat material in a foreign language in the writing instructions of the Faculty of Humanities but according to them, italics can be used to point out linguistic material in works of linguistics (Tiedekunnan kirjoitusohjeet [Writing instructions of the faculty 2008). Consequently, these instructions have probably also affected to the frequency of flagging of the Anglicisms in the thesis written in Modern Finnish.

Also in the thesis written in Regional Studies, flagging and double flagging (representing approximately 50 per cent of flagged Anglicisms) were common. Like in Modern Finnish, this suggests that English terms are not (yet) part of the language of the field and thus, they have to be treated differently from the Finnish terminology. In fact, according to the writing instructions of the Faculty of Public Administration, quoting text in a foreign language should be avoided but using unestablished foreign

terms is to some extent acceptable (Hallintotieteellisten töiden laadintaohjeet 2007-2008 [Writing instructions for works of the faculty of public administration 2007–2008] 2007). The surprisingly high percentage of flagged Anglicisms in the thesis written in Marketing contradicts to some extent the hypothesis that English terms have become part of the established terminology of the field. Although there were a great deal of Anglicisms in the thesis, the majority of them were separated from the body text. However, this was typically done with parentheses and double flagging did not occur which suggests that Anglicisms are acceptable in the field as long as they are somehow separated from the Finnish text. In the Marketing thesis, a Finnish equivalent typically preceded the flagged Anglicisms, which makes the text more reader-friendly and softens the following Anglicism. In addition, the use of flagged Anglicisms, or Anglicisms in general, seems to be a reference to international research terminology which is a sign of the internationality of science today. The rarity of flagged Anglicisms in the thesis written in Computer Science was expected. It suggests that the English terms have become part of the established terminology of the field and they do not have to be highlighted or separated from the body text. In addition to flagging, functions of the Anglicisms were studied which is the topic of the following section.

## 4.4 Functions

Code-switching can serve a number of functions in spoken language. For example, different situations or topics may change the language used. In the present study, functions of Anglicisms in the doctoral theses were analysed according to Grosjean's (1982) method. The ten reasons for code-switching mentioned by Grosjean (see chapter 3.4) focus on code-switching in spoken language. Despite the differences in spoken and written language, seven of the ten reasons could be found in the doctoral theses. These reasons were: fill a linguistic need for lexical item, set phrase, discourse marker, or sentence filler; quote someone; specify addressee; qualify message, i.e. amplify or emphasize; mark and emphasize group identity; exclude someone from conversation; and change role of speaker, i.e. raise status, add authority, and show expertise.

Anglicisms in the doctoral theses could also be seen to perform several functions at the same time, i.e. they were seen to be multifunctional. This was the case in example (9) which was discussed already in terms of flagging.

(9) Sekä aineistolähtöinen (**grounded theory**) että tapaustutkimus (**case**) -metodi --. (Jousranta 2005:29.)

Both grounded theory (grounded theory) and case (case) method --.

In the above example the Anglicisms "grounded theory" and "case" could be seen to perform two functions: they qualified the message by amplifying the Finnish terms and showed the writer's expertise by showing that she knows also the English equivalents for the Finnish terms. In this case one could argue whether the Anglicisms were necessary because the Finnish equivalents are established and unambiguous, but nevertheless, the writer chose to use them to create added value. The Anglicisms are also a reference to international research terminology, and the Finnish terms seem to be translations from the English ones.

In the following example (10) the Anglicism "bad trips" -tila" (bad trips condition) could be seen to have two different functions: it filled a linguistic need for lexical item and possibly excluded someone from conversation, i.e. someone who is not familiar with the term or English.

(10) Voidaan myös ilmaista "tila", joka on seurauksena aineen käytöstä tai johon joudutaan (*kausijuoppous*, *myrkytystila*, "*bad trips*" -tila) --. (Kapiala 2003: 289.)

The "condition" which is caused by using drugs or the condition one gets in (periodical drinking, poisoning, "bad trips" condition) may also be mentioned --.

In the above example the Anglicism could be seen to fill a linguistic need for a medical term that does not seem to have a Finnish equivalent or it is not established. The fact that the Anglicism was flagged suggests that it is not an established term, at least not in this field of study, but perhaps it was the only alternative the writer could use in this case. The function of excluding someone from conversation could have been

unintentional, for example, if the writer did not have a choice to use a Finnish alternative if it did not exist. However, the function could have been also intentional, for example, if the writer wanted to include only specialists in the field in the conversation.

In example (11) the two Anglicisms could be seen to have four functions: specify addressee, i.e. other specialists in the field; qualify message, i.e. clarify; mark and emphasize group identity, i.e. among specialists in the field; and change role of speaker, i.e. raise status, add authority, and show expertise.

(11) Potilasryhmällä on skandinaavisessa psykiatriassa keskeinen asema, mutta Norjassa heidän tilaansa on nimitetty *rakenteelliseksi psykoosiksi* (en *constitutional psychose* [sic]) ja Tanskassa *psykogeeniseksi psykoosiksi* (en *psychogenic psychose* [sic]). (Kapiala 2003: 258.)

The group of patients has a central position in Scandinavian psychiatry, but in Norway their condition has been named constitutional psychosis (in English constitutional psychose [sic]) and in Denmark psychogenic psychosis (in English psychogenic psychose [sic]).

In this example the Anglicisms could be seen to specify addressee because the terms are field-specific. Thus, by using also the international terms the writer may have wanted to aim the information to other specialists in the field. This function, however, like the function of excluding someone from conversation in the previous example, could have been unintentional and the main function could have been, for example, qualifying the message, that is conveying additional information. The function of marking and emphasizing group identity could, at least in this case, be seen to relate to the function of specifying addressee. By using field-specific terms, the writer may have wanted to show that she belongs to a certain group of specialists to whom the information is aimed. The use of special international terminology could also be seen as a sign of showing expertise in the field. In this case it should be noted, however, that the writer has mistaken the two instances for terms entirely in English, although only the first parts are in English and the second parts most likely in Norwegian and/or Danish.

In the following example (12) the Anglicism could be seen to fill a linguistic need for lexical item.

(12) Kuvittelen, että maaseutudiskurssien poststrukturalistisen dekonstruktion avulla voitaisiin Suomessa ja muuallakin Euroopassa vapauttaa olennaisesti enemmän positiivista "**redneck**"- ym. energiaa --. (Rosenqvist 2004: 105.)

I imagine that with poststructural deconstruction of the rural discourses it would be possible in Finland and also in other parts of Europe to release significantly more positive "redneck" etc. energy --.

In this case it would have been possible also to use a Finnish word, for example "juntti"- or "maalaisjunttienergiaa" (redneck energy) instead of the Anglicism. The writer has, however, chosen to use the Anglicism because for him it may have had a different connotation than the Finnish equivalents, and he might have thought that it conveys the message better than a Finnish word. The Anglicism was, however, flagged which suggests that the writer was aware that it is not an established word in Finnish. It is impossible to infer the reasons for the use of the English word from the text but perhaps the writer thought that the use of it created added value.

In example (13) below the Anglicism primarily performed the function of quoting someone but it could also exclude someone from conversation, i.e. someone who does not know English.

(13) Hasan (1986: 179-180) toteaa kuvaavasti: "Psychiatry is quite married to the inherited language of the culture in all its abstractness". (Kapiala 2003: 72.)

As Hasan (1986: 179-180) illustrates: "Psychiatry is quite married to the inherited language of the culture in all its abstractness".

The quotation was in the thesis without a Finnish translation and thus, readers who do not know English are automatically excluded from conversation. The choice to use only a direct quotation may have been intentional, but the exclusion of some readers may, nevertheless, have been unintentional. The reasons for using a direct quote from English were impossible to infer from the context but perhaps the writer thought that the original English quote would have lost some of its meaning if translated into Finnish.

In all of the four doctoral theses two functions of Anglicisms occurred more than the others. These functions were: qualify message, i.e. amplify or emphasize, and fill a

linguistic need for a lexical item. In three of the theses, qualifying, i.e. amplifying, the message could be seen as the main function of Anglicisms but the doctoral thesis in Computer Science was an exception. In the thesis in question Anglicisms could be seen to fulfil mainly the function of filling a linguistic need. This is mainly because of the frequent use of English acronyms in the thesis. Especially the acronym "IT" occurred frequently (altogether 46 instances) in ML + EL compounds in the thesis, although the term has Finnish equivalents, as well. The writer, however, chose to use the English acronym instead of, for example, the Finnish acronym "atk" (automatic data processing). The reasons for the use of a foreign acronym may be various but in this study the reason was seen to be mainly that of filling a linguistic need. Other functions of using a foreign acronym might include qualifying message, i.e. amplifying, specifying addressee, and showing expertise. In the case of "IT", the writer may have thought that the Finnish "atk" does not convey the same message as "IT" and has thus chosen to use the original acronym. Other English acronyms used in the thesis included "ICT" and "GT", which also have Finnish equivalents, that is "tieto- ja viestintätekniikka" and "aineistolähtöinen", respectively (Jousranta 2005: 11, 29). The writer mentioned the Finnish equivalents in the thesis but used mainly the English acronyms, probably for the reasons stated above and also because the English equivalents are shorter than the Finnish ones and thus more practical and language economical. The writer probably also wanted to refer to international terminology where these acronyms are established terms.

In addition to the functions of qualifying message, i.e. amplifying or emphasizing, and filling a linguistic need for a lexical item, also the five other functions, i.e. quote someone, specify addressee, mark and emphasize group identity, exclude someone from conversation, and change role of speaker, i.e. raise status, add authority, and show expertise, occurred in the theses but not as often as the two other functions. These five functions are also more difficult to identify in the text because of their vague nature.

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<sup>&</sup>lt;sup>12</sup> Atk comes from automaattinen tietojenkäsittely.

<sup>&</sup>lt;sup>13</sup> From Information and Communication Technology and grounded theory, respectively.

Furthermore, the identification of these functions depends on the person analysing them and is thus subjective.

The Anglicisms in the doctoral theses can have other functions in addition to the ones mentioned here. It is not possible to state definite reasons for the use of Anglicisms in the theses because that would require acquiring more information from the writers of the theses which is not possible in the scope of this study.

#### **5 CONCLUSIONS**

The purpose of this study has been to examine Anglicisms in Finnish doctoral theses written at the University of Vaasa. The hypothesis was that the number of Anglicisms varies depending on the field of study and the topic of the thesis. Some fields of study can be expected to include and tolerate a great deal of Anglicisms, whereas in other fields their frequency is expected to be lower. The material consisted of four doctoral theses from different fields of study, namely one from Computer Science, one from Marketing, one from Modern Finnish, and one from Regional Studies. The most Anglicisms were expected to be found in the doctoral theses written in Computer Science and Marketing due to the strong influence of English in these fields of study. The least Anglicisms were expected to be found in the doctoral thesis written in Modern Finnish because English influence in the field is not strong. However, it was taken into consideration that the topic of a thesis can also influence the number of Anglicisms and their use in general in a thesis. The hypothesis was somewhat proved right, as the highest number of Anglicisms were in the doctoral theses written in Computer Science and Marketing which both included on average 0.43 Anglicisms per page. The theses written in Modern Finnish included a surprisingly high number of Anglicisms, amounting to 0.29 Anglicisms per page. The thesis written in Regional Studies included the lowest number of Anglicisms, amounting to 0.23 Anglicisms per page, but the number was not significantly different from the one in the Modern Finnish thesis.

Structurally embedded language (EL) islands, that is islands entirely in English, were the most common type of Anglicisms in three out of the four theses. Only in the thesis written in Computer Science, matrix language + embedded language (ML + EL) constituents, that is constituents including both Finnish and English, were the majority. On the basis of these results, it seems that the English language has an important role in academic texts and that purely English words and expressions are more common in scientific language written in Finnish than words that combine English and Finnish. One possible explanation for this might be that the English words and expressions have become an integral part of the established terminology of scientific language and, thus,

possibly more explanatory Finnish-English compounds are not needed. This seems to be the case especially in Computer Science where only 18 per cent of the Anglicisms were flagged which means that the majority are not highlighted but treated like Finnish words. In the other theses, flagging was significantly more common and at least 74 per cent of the Anglicisms in them were flagged, i.e. highlighted, for example, with parentheses or italics. On the basis of these findings, Anglicisms are more acceptable in Computer Science than in Marketing, Modern Finnish, and Regional Studies where they are typically highlighted in some way. This also suggests that Anglicisms are more integrated into the terminology of Computer Science than the language of the other fields included in this study. In addition, flagging, and the use of Anglicisms in general, in the theses depends, to some extent, on the writing instructions of each faculty.

The functions of the Anglicisms were also examined in this study, and the main functions of the Anglicisms in the doctoral theses could be seen to be qualify message, i.e. amplify or emphasize, and fill a linguistic need for a lexical item. Also in this respect the thesis written in Computer Science differed from the other theses, as in it the function of filling a linguistic need could be seen as the main function of Anglicisms, although in some cases it was possible to define Finnish equivalents for the Anglicisms. In contrast, in the three other theses the main function could be seen to be that of qualifying message, i.e. amplifying or emphasizing. In addition, the use of English terms seems to be a reference to international research terminology and thus, a sign of English thinking in the Finnish academia.

In this study the material was limited to four doctoral theses from different fields. To prove the dependency of the number of Anglicisms on the field of study and the topic, more material would be needed for the analysis. For example, in this study the topic of the doctoral thesis written in Modern Finnish was related to medical science and terminology, which probably explains the number of Anglicisms in the thesis. However, if more doctoral theses with different topics from the field were studied, the outcome could be different, that is the frequency of Anglicisms would probably be lower than in this study. In the future one might also choose doctoral theses, for example, from one discipline only and study the variation of the number of Anglicisms in one discipline. In

this way it would be possible to study the influence of the topic of and works cited in a thesis on the number of Anglicisms. One might also study Anglicisms in doctoral theses from other fields than the ones included in this study. Also comparing Anglicisms and their number in doctoral theses written in different times, for example in different decades, would most probably result in different findings than in this study. As the influence of English has increased during the past few decades, and it is still increasing, the results would probably show that the number of Anglicisms in Finnish doctoral theses has increased during the years. In addition, if one carried out a broader Anglicism study where, for example, borrowings and proper names were included, the results would probably show that Anglicisms in the Finnish language are common and the influence of English is indisputable.

#### WORKS CITED

## **Primary Sources:**

- Humala, Iris (2004). Syvenevä epäsymmetrinen liikesuhde. Tutkimus perinteisen toimialan yrityksen oppimis- ja selviytymisprosessista kansainvälisessä kilpailupaineessa [Deepening asymmetric business relationship. A study of the learning and survival process under pressures from international competition in a firm operating in a traditional field of industry]. Acta Wasaensia No 128. Liiketaloustiede 50. Markkinointi. Vaasa: Universitas Wasaensis.
- Jousranta, Anja (2005). Ei jää luuppiin Tietojenkäsittelytieteiden opiskelun onnistuneen alkutaipaleen edellytyksiä. Empiirisenä aineistona tietotekniikkateollisuusekonomien opintokokemukset ja opintojen kulku Vaasan yliopistossa [Tying up the study loop about the chances for a good start in IT studies. The empirical data concerns the progress and experiences of computer science students at the University of Vaasa]. Acta Wasaensia No 148. Tietotekniikka 4. Vaasa: Universitas Wasaensis.
- Kapiala, Ulla-Helena (2003). Voiko mielenterveyden häiriöitä ymmärtää ja nimetä? Psykiatria ja sen diagnoosinimikkeet [Can mental disorders be understood and named? Psychiatry and its diagnostic terms]. Acta Wasaensia No 121. Kielitiede 25. Vaasa: Universitas Wasaensis.
- Rosenqvist, Olli (2004). *Maaseudun asemoituminen myöhäismodernissa yhteiskunnassa* [*Positioning of the rural in the late modern society*]. Acta Wasaensia No 129. Aluetiede 9. Vaasa: Universitas Wasaensis.

### Secondary Sources:

- Appel, René & Pieter Muysken (1987). *Language Contact and Bilingualism*. London: Edward Arnold.
- Auer, J.C.P. (1984). *Bilingual Conversation*. Pragmatics & Beyond V:8. Amsterdam: John Benjamins Publishing Company.
- Auer, Peter (1992). Introduction: John Gumperz' Approach to Contextualization. In: *The Contextualization of Language*, 1–37. Eds. Peter Auer & Aldo Luzio. Amsterdam: John Benjamins Publishing Company.
- Auer, Peter (1995). The Pragmatics of Code-switching: A Sequential Approach. In: *One Speaker, Two Languages: Cross-disciplinary Perspectives on Code-switching*, 115–135. Eds. Lesley Milroy & Pieter Muysken. Cambridge: Cambridge University Press.

- Crystal, David (1997). *English as a Global Language*. Cambridge: Cambridge University Press.
- Gottlieb, Henrik (2005). Anglicisms and Translation. In: *In and Out of English: For Better, For Worse?*, 161–184. Eds. Gunilla Anderman & Margaret Rogers. Clevedon: Multilingual Matters Ltd.
- Grosjean, François (1982). *Life with Two Languages: An Introduction to Bilingualism*. Cambrigde: Harvard University Press.
- Hallintotieteellinen tiedekunta. Opinto-opas 2006–2007 [Faculty of public administration. Study guide 2006–2007]. Vaasan yliopisto.
- Hallintotieteellisten töiden laadintaohjeet 2007–2008 [Writing instructions for works of the faculty of public administration 2007–2008] (2007). Vaasan yliopisto, hallintotieteiden tiedekunta. Cited 5.4. 2008: http://www.uwasa.fi/hallintotieteet/opiskelu/laadintaohjeet/Laadintaojeet%2007-08
- Hallintotieteiden tiedekunnan jatkokoulutusopas 2005–2006 ja 2006–2007 [Faculty of public administration postgraduate studies study guide 2005–2006 and 2006–2007] (2007). Vaasan yliopisto, hallintotieteiden tiedekunta. Cited 12.2.2007: http://lipas.uwasa.fi/opinto-opas/hut/ jatkokoulutus.pdf
- Halmari, Helena (1997). *Government and Codeswitching: Explaining American Finnish*. Studies in Bilingualism Vol. 12. Amsterdam: John Benjamins Publishing Company.
- Hiidenmaa, Pirjo (2003). *Suomen kieli who cares?* [Finnish language who cares?] Helsinki: Otava.
- --- (2006). Suomenkielinen tieto- ja tiedekirjallisuus [Finnish non-fiction and science literature]. Cited 12.2.2007: http://www.tieteessatapahtuu.fi/0306/ hiidenmaa0306. pdf
- *Humanistinen tiedekunta. Opinto-opas 2006–2007* [Faculty of humanities. Study guide 2006–2007]. Vaasan yliopisto.
- Humanistisen tiedekunnan jatkokoulutusopas 2005–2007 [Faculty of humanities postgraduate studies study guide 2005–2007] (2007). Vaasan yliopisto, humanistinen tiedekunta. Cited 12.2.2007: http://lipas.uwasa.fi/opinto-opas/hut/jatkokoulutus.pdf
- Hämäläinen, Unto (2008). Kiivasta väittelyä [Intense debate]. *Helsingin Sanomat Kuukausiliite* tammikuu 2008, 30–34.

- Hämäläinen Unto & Marjukka Liiten (2008). Väitöksiä ennätysmäärä lähes kaikki englanniksi [A record number of doctoral theses nearly all in English]. *Helsingin Sanomat* 5.1.2008, A3.
- International Study Programmes Database (2006). CIMO. Cited 13.4.2007: http://finland.cimo.fi/studying/international study programmes.html
- Jonsson, Carla (2005). *Code-switching in Chicano Theater: Power, Identity and Style in Three Plays by Cherrie Moraga*. Umeå: Umeå universitet. Cited 25.10.2006: http://www.diva-portal.org/umu/theses/abstract.xsql?dbid=498
- *Kauppatieteellinen tiedekunta. Opinto-opas 2006-2007* [Faculty of business. Study guide 2006-2007]. Vaasan yliopisto.
- Kelly-Holmes, Helen (2005). *Advertising as Multilingual Communication*. Hampshire: Palgrave Macmillan.
- Kontio, Anri (2001). Changing World Changing Word: A Study of Anglicisms in Finnish Newspaper Advertisements. An unpublished MA thesis. University of Oulu.
- Kovacs, Magdolna (2001). Code-switching and Language Shift in Australian Finnish in Comparison with Australian Hungarian. Åbo: Åbo Akademi University Press.
- Lallukka, Saara (2005). Anglicisms in the Annual Reports of Selected Finnish Exchange-listed Companies. An unpublished MA thesis. University of Joensuu.
- Lauttamus, Timo (1990). Code-switching and Borrowing in the English of Finnish Americans in an Interview Setting. Studies in Languages N:o 20. Joensuu: University of Joensuu, Faculty of Arts.
- Liiten, Marjukka (2008). Promootiot ja vuosijuhlat panivat vauhtia tohtorituotantoon [Graduation ceremonies and annual celebrations gave a push to doctorate production]. *Helsingin Sanomat* 5.1.2008, A4.
- Londen, Anne-Marie (1994). So what else is new: Om samtalsstilen under en herrmiddag [About conversation style during a gentleman dinner]. In: *Stilsymposiet i Göteborg 21–23 maj 1992*, 181–205. Utg. av [ed.] Peter Cassirer. Göteborg: Institutionen för svenska språket, Göteborgs universitet.
- Markkanen, Tapio (2006). *Yliopistojen kolmas tehtävä ja suomen kieli* [The third duty of universities and the Finnish language]. Cited 12.2.2007: http://www.tieteessatapahtuu.fi/0306/markkanen0306.pdf
- Moore, Kate & Krista Varantola (2005). Anglo-Finnish Contacts: Collisions and Collusions. In: *In and Out of English: For Better, For Worse?*, 133–152. Eds. Gunilla Anderman & Margaret Rogers. Clevedon: Multilingual Matters Ltd.

- Myers-Scotton, Carol (1993). *Duelling Languages: Grammatical Structure in Codeswitching*. Oxford: Oxford University Press.
- Niemi, Katja-Maaret (2007). On Anglicisation of Academic Finnish. The Case of the University of Vaasa. An unpublished MA thesis. University of Vaasa.
- Nuolijärvi, Pirkko (2005). Suomen kielen tulevaisuus muuttuvassa maailmassa [The future of the Finnish language in the changing world]. Cited 12.2.2007: http://www.tieteessatapahtuu.fi/0705/nuolijarvi.pdf
- Oittinen, Vesa (2006). *Onko englannin ylivalta tieteessä välttämätöntä?* [Is the supremacy of English in science necessary?]. Cited 12.2.2007: http://www.tieteessatapahtuu.fi/0506/Oittinen0506.pdf
- Opetusministeriö [Ministry of Education] (2006). KOTA-tietokanta [KOTA database]. Cited 8.1.2007: http://kotaplus.csc.fi:7777/online/Haku.do
- --- (2007). Yliopistokoulutus ja sen kehittäminen [University education and its development]. Cited 13.4.2007: http://www.minedu.fi/OPM/Koulutus/yliopistokoulutus/?lang=fi
- Saari, Mirja (2006). Stadin ruotsi. Huomioita erään nuorisoryhmän koodin vaihtelusta [Swedish of the city. Observations on code-switching of a youth group]. In: *Helsinki kieliyhteisönä*, 142–161. Toim. [Ed.] Kaisu Juusela & Katariina Wisula. Helsinki: Helsingin yliopisto, Suomen kielen ja kotimaisen kirjallisuuden laitos.
- Sajavaara, Kari, Jaakko Lehtonen, Heikki Leskinen, Paavo Pulkkinen, Anne Räsänen & Tuula Hirvonen (1978). *The Anglicism Project. Influence of English on Modern Finnish: Preliminary Report on a Research Programme. Background and Methods.* Reports from the Department of English. Occasional Papers No 2. Jyväskylä: University of Jyväskylä.
- Sajavaara, Paula (1989). Vierassanat [Foreign words]. In: *Nykysuomen sanavarat*, 64–109. Toim. [ed.] Jouko Vesikansa. Juva: WSOY.
- Sumuvuori, Pentti Johannes (2007). "Chillii!!!!...catchattiin Fishiä ja kinkeiltiin:" English Borrowing and Code-switching in a Finnish Student Newspaper. An unpublished MA thesis. University of Vaasa.
- Thomason, Sarah G. (2001). *Language Contact: An Introduction*. Edinburgh: Edinburgh University Press.
- Tiedekunnan kirjoitusohjeet [Writing instructions of the faculty] (2008). Vaasan yliopisto, humanistinen tiedekunta. Cited 5.4.2008: http://www.uwasa.fi/humanistinen/opiskelu/kirjoitusohjeet/ohjeet2004.pdf

- Tilastokeskus [Statistics Finland] (2006). Lukiokoulutuksen päättäneiden kielivalinnat 2006 [Language choices of the students graduating from high school in 2006]. Cited 11.4.2007: http://www.stat.fi/til/ava/2006/ava\_2006\_2006-12-12\_tie\_001. html
- Tommila, Päiviö (toim.) [ed.] (2001). Suomen tieteen historia 1: Tieteen ja tutkimuksen yleinen historia 1880-luvulle [History of Finnish science 1: The general history of science and research until 1880s]. WSOY: Helsinki.
- Tommila, Päiviö (toim.) [ed.] (2002). Suomen tieteen historia 4: Tieteen ja tutkimuksen yleinen historia 1880-luvulta lähtien [History of Finnish science 4: The general history of science and research since 1880s]. WSOY: Helsinki.
- University of Helsinki (2006). International Master's Degree Programmes. Cited 13.4.2007: http://www.helsinki.fi/internationalprogrammes/index.html
- Vaasan yliopisto (2004). Kauppatieteellinen jatkokoulutusopas 2002–2004 [Faculty of business studies postgraduate studies study guide 2002–2004]. Cited 12.2.2007: http://lipas.uwasa.fi/opinto-opas/ktt/jatkokoulutus.html
- --- (2005a). Acta Wasaensia 1971–1999 (ISSN 0355-2667). Cited 12.2.2007: http://lipas.uwasa.fi/julkaisu/acta1.html
- --- (2005b). Teknillistieteellisen alan jatkokoulutusopas 2004–2005 [Faculty of technology postgraduate studies study guide 2004–2005]. Cited 12.2.2007: http://lipas.uwasa.fi/itt/jatkokoulutus.html
- --- (2006a). Acta Wasaensia 2000- (ISSN 0355-2667). Cited 12.2.2007: http://lipas.uwasa.fi/julkaisu/acta2.html
- --- (2006b). Kauppatieteiden kandidaatti ja maisteri [Bachelor and master of science]. Cited 8.1.2007: http://www.uwasa.fi/tekniikka/oppaat/opintooppaat/di\_06/kauppatutkinnot.pdf
- --- (2006c). Tekniikan kandidaatti ja diplomi-insinööri [Bachelor and master of science in engineering]. Cited 8.1.2007: http://uwasa.fi/tekniikka/oppaat/opintooppaat/di 06/tekniikkatutkinnot.pdf
- --- (2006d). Opintokuvaukset [Descriptions of studies]. Cited 8.1.2007: http://www.uwasa.fi/tekniikka/oppaat/opintooppaat/di\_06/kuvaukset.pdf
- --- (2006e). Vaasan yliopiston väitökset 2006 [Doctoral theses at the University of Vaasa in 2006]. Cited 11.1.2007: http://www.uwasa.fi/tutkimus/vaitokset
- --- (2007a). Study Programmes in English. Cited 13.4.2007: http://www.uwasa.fi/kv-asiat/english/study-programmes-in-english/

- --- (2007b). Yliopiston tieteelliset julkaisusarjat [Scientific publication series of the University]. Cited 12.2.2007: http://www.uwasa.fi/tutkimus/julkaisut/.
- Väyrynen, Raimo (2006). *Suomenkielinen tiede* [Science in Finnish]. Cited 6.2.2007: http://www.tieteessatapahtuu.fi/0306/vayrynen0306.pdf
- Wardhaugh, Ronald (1986). An Introduction to Sociolinguistics. Oxford: Basil Blackwell.
- Weinreich, Uriel (1968). Languages in Contact: Findings and Problems. The Hague: Mouton Publishers.

## APPENDIX: Anglicisms in the doctoral theses

Anglicisms are listed according to the writer of the thesis and the page number where the Anglicism occurred.

#### Humala:

```
9: Abstract
10: business-to-business -ydinsuhteen
12: win-win -tilanteita
15: (actions)
   (episodes)
   (sequences)
   (relationships)
   (partner base)
16: (mutuality)
17: (steady state)
18: (anxiety)
20: (environmental scanning)
   BI:tä (business intelligence)
27: (domain-specific model)
30: (market intelligence)
   niche-segmentteihin
   (effective efficiency)
31: Kuva 2. Niche-segmentit
   economy, efficiency, effectiveness, efficacy
   (economy)
   (efficiency)
   (effectiveness)
   (efficiency)
   (effectiveness)
   (efficacy)
33: (drive)
34: (networking man)
40: (knowledge management)
42-43: (mass customization)
43: (co-configuration)
45: (ICT)
47: (offering)
49: (collaboration)
   (co-operation)
51: (strategic value net)
   (absorptive capacity)
54: win-win -tilannetta
   win-win -yhteistyössä
55: (input-output)
   (capability)
```

```
(mutuality)
   (particularity)
   (inconsistency)
58-60: Taulukko 1. (effectiveness) (efficiency) (effectiveness)
61: (co-operative interorganisational relationships, IORs)
63: (specific trust)
64: (goodwill)
   (fast trust)
67: (cost efficiency)
   (effectiveness)
   (relational embeddedness)
   (structural embeddedness)
   (positional embeddedness)
   (embeddedness)
   (representational role)
78: (strategic intent)
   (environmental scanning)
   business intelligence (BI)
81: (diversity)
   (dissipative)
83: (issues management)
84: (recursiveness)
   (reproductivity)
   (heterarchy)
   (domain-based environmental scanning)
88: (knowledge management)
90: feedback
   (feedback)
   (intuition)
   (interpreting)
   (integrating)
   (institutionalizing)
   (single- and double-loop learning)
94: (love of learning)
   (anxiety)
   (persuasion)
   (forced)
95: (effective)
105: (direct object of learning)
   (act of learning)
   (indirect object of learning)
106: (act of learning)
114: (focal relationships)
116: case
117: (focal net)
121: (focal firm)
122: (micronet-macronet)
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design-suuntautuneella
123: case
126: grounded theory -menetelmää
127: (dimensions)
   (axial coding)
130: (consistency)
   (congruency)
   (unity)
131: (the method of narrative changeaccounting)
141: design-suuntautunut
142: (cognitive moral development, CMD)
143: (effective)
   (focal firm)
146: (effectiveness)
147: brandiin
149: Kuva 11. nyky-design, design, Open book –kirjanpito, Design
152: (grounded theory)
157: (act of learning)
180: Kuva 16. Design
183: (trading)
191: Kuva 17. Design
195: Kuva 19. Design
203: (cost efficiency)
   (effectiveness)
217: (efficiency)
   (effectiveness)
222: (collective actor)
223: (focal relationship)
231: ns. middle-range -malli
234-250: Summary
251: "Now this is not the end. It is not even the beginning of the end. But it is, perhaps,
   the end of the beginning."
273-274: Liite 1. grounded theory -metodologiaan
275-277: Liite 2. (win-win), partnerien
Jousranta:
10: Abstract
11: (ICT-ala)
     ICT-alan
     ICT-alan
     ICT-sektorilla
     ICT-käyttäjäsektorilla
     "The ICT sector itself faces particular challenges in fulfilling its role in
     contributing to the success of the European Union's economic success. These
     include keeping pace with the demands of rapid technological development, the
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constant innovation in products and services, and the emergence of new markets.

Ensuring that there are sufficient numbers of people within the sector with the required skills, knowledge and competence will be critical."

12: IT -alan

ICT-alan

- 13: IT-alan
- 15: Computer Science Education -teeman
- 18: IT-kouluttamisen
- 19: IT -ammattilaisia
- 20: batchelor-tason
- 23: IT-asiantuntijuuden

IT -teollisuus

- 24: "They just come in and after a number of years we see some of them graduating".
- 26: IT-kuplan
- 29: (grounded theory)

(case) -metodi

- 30: case-tutkimuksena
- 31: IT-opiskelijaidentiteetin
- 41: "computer scientists appeared to be in some confusion over what computer science is".
- 47: "IT-kuplan"

"It-johtajillekin"

49: (multidisciplinarity)

(interdisciplinarity)

(transdisciplinarity)

- 50: IT-ammattilaisten
- 51: IT-alan
- 53: CORE (Clinical Outcomes in Routine Evaluation) -lomakkeella

(not at all - most of the time)

(I have felt OK about my self)

(I have felt tense, anxious or nervous)

(I have felt able to cope when things go wrong)

(I have thought of hurting myself)

55: IT-koulutuksessa

IT-ohjelmat

CS- ja IS-ohjelmien

- 56: IT-sektorin
- 57: Computer Science Education
- 59: Multimediajärjestelmien
- 60: multimedia
- 62: Multimediajärjestelmien
- 70: case-tutkimuksen

(grounded theory)

72: (perspective making)

(perspective taking)

73: GT-tutkimusote

GT

GT-metodi

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GT-menetelmän
     grounded theory; GT
     (open coding)
74: (axial coding)
     (selective coding)
77: (grounded theory)
78: IT -ammattilaiseksi
101: IT-alalle
102: (passive role playing -method)
107: grounded teorian
     case-menetelmien
108: IT -ala
     IT-sektorin
     GT-metodin
110: IT-sektorilla
112: IT-alan
     IT-alan
114: IT-ala
     IT-alalle
     GT-menetelmä
115: IT-sektorikin
116: IT-sektorilla
     "IT-alan"
     ns "hypeä"
     "hypeimmät"
     dotcomit
     "Hype"
117: IT-alan
118: IT-sektoriin
     IT-sektorin
     IT-sektori
     IT-sektorista
     IT-sektorille
     IT-sektorin
119: IT-sektorille
120: chat
125: GT-menetelmää
129: IT-alalla
     IT-alan
132: flow-virtaus-kokemus
133: feeling - watching - thinking - doing -mallina
135: (empowerment)
149: IT-toimialaa
150: IT-ala
151: IT-alan
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IT-sektori

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168: IT-alan
169: (situated learning)
170: honeymoon
179: ranking-listan
185: Multimedia- ja viestintä -koulutusohjelmassa
189: IT-miljonääriä
     IT -alalla
     media
192: case-kuvauksia
198: ICT-koulutuksessa
202: ranking-listoista
208: IT-alan
212: case-tutkimusten
215: ICT-alan
216-220: Summary
243: Liite 2a. out, in, hype
Kapiala:
8: Abstract
18: NLP eli neuro-linguistic programming
     NLP
     NLP
     (en cryptic language)
     (en delphic language)
21: (entities)
     (properties)
     (activities)
     (dimensions)
     'universe of items'
     ('item of reference')
24: NLP:n (neuro-linguistic programming)
29: acting out
     splitting
33: (la, en diagnosis)
58: Mind-body-ongelmasta
59: (mindless brain)
     (brainless mind)
68: (sick)
72: "Psychiatry is quite married to the inherited language of the culture in all its
abstractness".
76: ("disease or illness")
     (mental illness)
     "There is no medical moral, or legal justification for involuntary psychiatric
interventions, such as 'diagnosis', 'hospitalization', or 'treatment'. They are crimes
against humanity."
78: collegeiden
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(emotional intelligence)
88: Taulukko 3. (software) (instruction set) (hardware)
     (software)
     (hardware)
     (instruction set)
113: (similarity vs. non-similarity of structure between language and facts)
       (undefined)
       (over-/under-defined)
       (general semantics)
114: (sanity)
       unsanity
       insanity
       (insane)
       Kuvio 4. (sanity) (insanity) (unsanity)
115: (therapeutic milieu)
       (re-direct)
       (brighter affect)
116: (sanity and unsanity)
117: ("by intension -- over-defined")
       ("by extension -- under-defined)
118: (unsanity)
       (removal)
       "Smith1Monday, Smith1Tuesday, hurt1950, hurt1970, New Orleans"
       ("subjects for some type of re-education")
119: (handle-me-down wellness)
122: (ns. holding)
128: Kuvio 5. (disease) (sickness) (illness)
       (disease)
       (illness)
129: (tag)
132: impression
136: "Good communication with a patient is always good medicine"
139: (sanity)
       (unsanity)
       (insanity)
140: disease-termin
       dis-ease
163: (appropriate vs. inappropriate)
       (poor self-concept)
171: (problem \ oriented \ record = POR)
174: ("-- so-called 'experts' --)
       (undue)
176: (reification)
177: (health)
       (ill health)
194: (entities)
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(principles)
       (immaterial objects)
       (material objects)
       (properties)
       (quantities)
       (qualities)
       (relations)
       (activities)
       (operations)
       (states)
       (processes)
       (dimensions)
       (time)
       (position)
       (space)
215: (disease)
       (illness)
232: median
245: (scientific)
       (humanities)
246: (neoterm)
247: (neosemanticism)
257: (en soul, spirit)
258: (en mind)
       (en breath of life)
       (en sinew, tendon)
       (en nerve)
       (en constitutional psychose)
       (en psychogenic psychose)
259: (psychosomatic)
       (somatopsychic)
262: (en depression)
       (en confusion)
       (en conciousness)
270: en depression
277: NLP:n (neuro-linguistic programming)
305: (tics)
339: (en, sa fugue)
357-361: Summary
389: LIITE 7: CP, crazy
392-393: LIITE 9: en depression
Rosenqvist:
3: niin sanotun referee-menettelyn
8: Abstract
15: niin sanotun referee-menettelyn
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95: (rurality)
96: (rural place)
    "what this world needs is a few more rednecks"
   (lay discourses)
   (popular or media discourses and professional discourses)
   (sign = rurality)
   (signification = meaning of rurality)
   (referent = rural\ locale)
97: (rural space)
   (platform)
   ('jumping scale')
99: agri-business-strategian
   (utilitarian discourse)
   high-tech -maatalouden
   (hedonist discourse)
   (spatial)
105: "redneck"- ym. energiaa
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urban areas in Finland.

- 111: Finnish rural policy aims to strengthen the interaction between rural and urban areas. To support this objective, research on the social and regional meanings and status of the countryside is needed. It is argued in this article that the basis of much of the current research, the division of regions into densely populated localities and sparsely populated areas as defined by Statistics Finland, is poorly suited for a regional measurement of commuter flows between rural and urban areas. The assessment of commuter flows between statistically defined localities and sparsely populated areas fails to give a realistic picture of the interaction between rural and
- 114: Table 1. Daily commuting flows (persons) between the most central localities and sparsely populated areas in five Finnish small-town districts in 1989, 1992, 1995, and 1998, according to the boundaries of statistical localities in 1995 (Statistics Finland, unpublished data). District Year From sparsely populated area to the most central localities From the most central localities to sparsely populated area Difference
- 115: Table 2. Commuting flows between rural and urban areas in Kokkola district, in 1998: data based on the boundaries of localities in 1995, as defined by Statistics Finland (unpublished data), compared to the flows estimated by the author. Definer of the regional framework From rural to urban areas From urban to rural areas Net commuting Statistics Finland 1,143 persons, or 17% of those employed in the rural areas 2,457 persons, or 21% of those employed in the urban areas From urban to rural areas +1,314 The author 1,709 persons, or 25% of those employed in the rural areas 201 persons, or 2% of those employed in the urban areas From rural to urban areas +1,508 persons Urban areas in this table consist of the central locality of Kokkola and the locality of Öja. Rural areas refer to the district's other localities and sparsely populated areas.
- 123: An integrated multisectoral and multilevel rural policy has become in important rhetorical element in the Finnish and the European discussions on the development of the countryside. The implementation of an integrated rural policy is hindered by the division of the discussion into three contradicting discourses: (1)

- regional or urban development discourses, (2) agricultural and forest-sectory discourses, and (3) rural discourses. The obstacles to an integrated rural policy that lie behind these discourses are examined in this article from the perspective of rural development. The focus is on the discourse regarding regional or urban development.
- 135: The aim of this article is to discuss possibilities for producing competitive countryside within Finnish society. This starting point is problematic because countryside is usually regarded as a social periphery. In this article countryside is conceptualized as a social construct which can be spatial, symbolic, and even metaphoric in character. The production of competitive countryside is approached from two viewpoints: (1) concentrating regional development and (2) hegemonic urban discourse. By means of analyzing counterurbanization it is showed that territorial countryside lost population in Finland during the 1990s. It is suggested that competitive spatial countryside could be realized by strengthening extra-local rather than intra-local networks. With regard to symbolic and metaphoric countryside, gaining competitiveness through artificial rural products or through resisting the modernist way of life is assessed.
- 136: Leader/Pomo -toimintaryhmissä
- 137: Figure 1. Location of the study areas. Rural district Small urban district Large urban district Metropolitan district
- 138: Figure 2. Population and job change trends in the study areas in 1989-1998 (for categories MS, PK, IK and M, see Figure 1). Source: Statistics Finland. Population in rural districts Population in small urban districts Population in large urban districts Population in metropolitan districts Jobs in rural districts Jobs in small urban districts Jobs in large urban districts Jobs in metropolitan districts
- 139: Figure 3. Average annual change rates of population, jobs, and commuting in 1989-1998 per regional category (for categories MS, PK, IK and M, see Figure 1). The bold lines in the diagrams describing population and jobs represent national averages. The arrowheads in the diagram representing commuting indicate the direction of the commuting flow. For example: MS>MS means commuting within a rural district and MS> means commuting outward. Source: Statistics Finland. Population Jobs Commuting
- 140: Figure 4. Average annual population change rates in 1989-1998 in the most central localities of the examined small urban districts (PK-KT), their other localities (PK-MT), and the sparsely populated areas of these districts (PK-HA), localities of the rural districts (MS-T), and their sparsely populated areas (MS-HA) (for categories PK and MS, see Figure 1). Source: Statistics Finland.
- 143: (emansipatory/empowering)

(spatial fix)

145: (urban amenity) (empowering)

146: (representational spaces)

155: "urbaanit cowboytkin"

158: (otherness)

(sameness)

171: Leader