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Writing in Swedish as a First Language (L1) and English as a Foreign Language (FL):

[A Topic-Related Functional Perspective]

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1. Introduction

Multilingualism is rapidly growing in the global community as is the need to communicate in a foreign language in both speech and writing. Foreign language instruction has developed from a focus on reading, prior to the Second World War, to audio-lingual and communicative approaches in the post-war period and, from the 1980's onward, to a greater interest in foreign language writing. This is due largely to the demands of the globalized informational society (Warschauer, 2006). Proficiency in English is particularly important in this global society since English is the dominant language of communication in many parts of the world. English language skills are essential for higher studies, as well as in almost all kinds of professions in an increasingly international labour market. Writing in English is an important part of the all-round communicative skills needed in this day and age.

To our knowledge little research exists on Swedish speaking children's writing in English as a foreign language. However, there is one thesis which includes studies involving a group of 13-year old participants who write in Swedish (L1) and English (FL) namely Lindgren's thesis from 2005. Lindgren has used a combination of keystroke logging, stimulated recall and visualisation in order to interpret keystroke log files and, in so doing, gain an understanding of the cognitive processes involved in L1 and FL writing. In her thesis a taxonomy for the analysis of on-line revision is proposed. In an empirical study she found that 13 year old writers revised more when they wrote in English as a foreign language than in Swedish as a first language. This corresponds with the findings of other studies (Thorson, 2000; Broekkamp & Van den Bergh, 1996). Writers revised more in EFL and they revised more on a linguistic level and not as much on a conceptual level.

Other studies that focus on children's and teenagers' writing in L1 and FL (or more frequently, L1 and L2) are, for example: "Reading and Writing in a Foreign Language" (Stevenson, 2005), and "First Language and Second Language Writing: The Role of Linguistic Knowledge, Speed of Processing, and Metacognitive Knowledge" (Schoonen, van Gelderen, de Glopper, Hulstijn, Simis, Snellings, Stevenson, 2003). Stevenson (2005) found that more attention was devoted to linguistic processing and less attention to conceptual processing in FL than in L1. Schoonen et al's study was a longitudinal, interventional study in which the results showed, among other things, that L2 writing proficiency is "…highly

correlated with L1 writing proficiency, more than with either L2 linguistic knowledge or the accessibility of this knowledge" (Schoonen et al, 2003, p 166).

1.1. The object of this study:

This paper is a study of the writing behaviour of some (n=21) Swedish speaking 14-15-year olds when composing in Swedish (their first language – L1) and in English (as a foreign language – FL). Swedish children learn English from an early age at school (between the first and third grade). They also pick up a lot of English by watching TV, using the Internet, etc. English is very commonly used in Sweden and in this regard can almost be said to have the status of L2 (second language). Thus, much of the research applying to L2 is also applicable to FL in this case. However, the term L2 is used when the foreign language being learnt is an official language of the country in which one resides, so the term FL is the one used in this paper.

Hopefully the present study will throw some more light on questions such as the importance of writing skills in L1 for the development of writing skills in FL, and the ways in which L1 and FL writing processes are connected. Furthermore, perhaps we can identify the strategies used by students when their language abilities are insufficient, the linguistic devices they use to create coherence, and the kinds of strategies that could be taught in order to facilitate foreign language writing. Naturally these are likely to differ depending on the needs of the individual.

1.2. The approach adopted in this study:

The approach taken in this paper will be a psycholinguistic/cognitive approach using the key-stroke logging tool, *ScriptLog* (Strömqvist & Karlsson, 2002; Strömqvist & Malmsten, 1998. See www.scriptlog.net for more information). ScriptLog has been used in several research projects, sometimes in combination with other tools such as eye-trackers. For other studies using ScriptLog see also Holmqvist et al. (2002), Wengelin (2002), and Strömqvist, Ahlsén, Wengelin, Grönqvist, and Hagman (1999).

There will also be in-depth studies of two of the subjects writing in L1 and FL. The aim of these in-depth studies will be to evaluate the use of the qualitative analysis tools described below. These tools will be used to examine the writing in L1 and FL of the two subjects from the point of view of the emerging text and so possibly gain a greater understanding of the association between the textual structure of output and the underlying cognitive processes of

planning and formulating (Spelman Miller, K., 2006). The analytical tools used here are called 'framing devices' and 'potential completion points' and they will be explained in more detail in Section 4. The category of 'framing devices' was introduced by Spelman Miller in order to observe the ways in which writers introduce new topics. The aim is to see whether there is a difference in the use of framing devices and thus in the potential discourse function of certain grammatical units between the L1 and FL writing of these individuals. The other tool of analysis, 'potential completion points' is used to investigate the location of pauses (made possible by ScriptLog) in the emerging text. According to Wengelin (2002) pauses are more likely to occur at discourse boundaries between large units such as paragraphs than they are at smaller units. Such pauses (at, for example, boundaries that are typically realized as paragraphs) may form units that have potentially significant discourse roles in introducing, maintaining or developing topic (see KSM, 2006). Pauses at more local levels seem to indicate lexical disfluencies while pauses located at discourse boundaries (for example paragraph and sentence boundaries) may indicate planning with regard to content, as well as monitoring of text already written. The analysis of potential completion points may allow us to see where in the text the writer has paused to plan, revise etc. (based, nonetheless, on qualified speculations) in a way that is not possible to see in the final edited text. Also, perhaps there is a correlation to be found between certain potential completion points and final completion points. Furthermore, these analyses will be combined to see whether or not there is any correlation between framing devices and potential completion points, and, if so, if in turn there are any similarities or difference between the L1 and FL writing of these particular individuals in this regard. As mentioned earlier these analytic tools have been introduced by Spelman Miller (2006) (from now on referred to as KSM). KSM has used various keystroke logging tools to investigate the writing processes of, amongst others, 21 academic writers who either have English as a first language (L1) or as a second language (L2). Her analysis is based on a pausological study made possible when using keystroke logging. Her focus is on the emerging status of the language. KSM's analysis is threefold: firstly, the definition of word level locations (of pauses) is made more precise than in previous studies (divided into, for example, noun, determiner, disjunction, conjunction, etc). Secondly, the location of the pause is analysed from the point of view of its 'potential completion point'. This point may change during the writing and revising process – for example, a pause may be at the word-level location and then, followed by a deletion and a full stop, turn out to be at a sentence completion point. Thirdly, KSM uses the concept of

framing devices (based on Halliday's theory of theme, (e.g. 2004) and on Goutsos' categorizations (e.g. 1997)) to study the pause location from the perspective of its function in establishing or introducing topic (KSM, 2006). The introduction of this analytical device will hopefully allow for a combination of a functional text analysis and a pausological analysis which may facilitate the tracking of mental activities as they unfold thus leading to a greater understanding (albeit by no means a comprehensive understanding) of the cognitive processes of writing.

Issues such as the social context within which FL writing is learned and performed, as well as issues concerning motivation and goals, although very important issues and essentially inseparable from the cognitive perspective, will only be treated marginally. However, the intention is for these issues to be the focus of a future study.

In order to study differences and similarities between L1 and FL writing, it is necessary to have an understanding of writing processes in general. According to Kellogg, 2006, writing draws on three major cognitive systems: Thinking, memory and language. These three systems are depicted by Kellogg as three overlapping, interdependent circles with 'written composition' in the centre. Naturally there are many similarities to be found when comparing factors that can lead to good L1 and FL writing. Knowledge of the conventions of writing is important in both cases (these conventions are likely to be culturally specific, or at least genre specific). Linguistic knowledge about language as "meaning", as well as meta-linguistic knowledge, about language as "form", is naturally important. Proficiency in the use of this knowledge is also essential. The term: "Writing is a complex task" is perhaps a cliché, but it is nonetheless true. This complexity necessitates the activation and specific control of writing processes, taking into consideration aspects such as knowledge of topic, audience, genre; planning, translation/generation of text (from concept to linguistic form), and revision/editing'; terminology from, amongst others, Hayes and Flower (1980). In order to reach fluency in FL writing, sufficient knowledge of the target language on the lexical, orthographic and syntactical levels is also required (Ransdell & Barbier, 2002, pp. 1-10). Much of the research being done in foreign language writing points to the need for the acquisition of specific skills, such as, for example spelling.

2. Background

Up until the 1980's, writing research was primarily focused on the final, edited product. With the development of computer tools that enable the study of the actual process of writing, the

perspective has changed. Recently the tide has once again turned and writing research is now more integrated, dealing with both the product and the process. As in many other fields concerned with the study of complex tasks, the concept of working memory and cognitive load is an aspect that has received considerable attention. Many researchers are now also focusing on the social dimension of writing (for example, Hayes, 1996) which, as has already been mentioned, will only be treated marginally in this paper.

2.1. Theories used in FL writing research:

2.1.1. Models for process-oriented writing research:

The most extensively used model of the writing process is that of Hayes and Flower (1980).

Task Environment

Writing Assignment

Topic
Audience

Text

Produced

So Far

Writer's Long Term Memory

Knowledge of Topics
Knowledge of Audience
Stored Writing Plans
Knowledge of Sources based on literature search

Planning

Generating

Organizin

Goal Setting

Translating

Revising/ Reviewing

Reading

Editing

Monitor
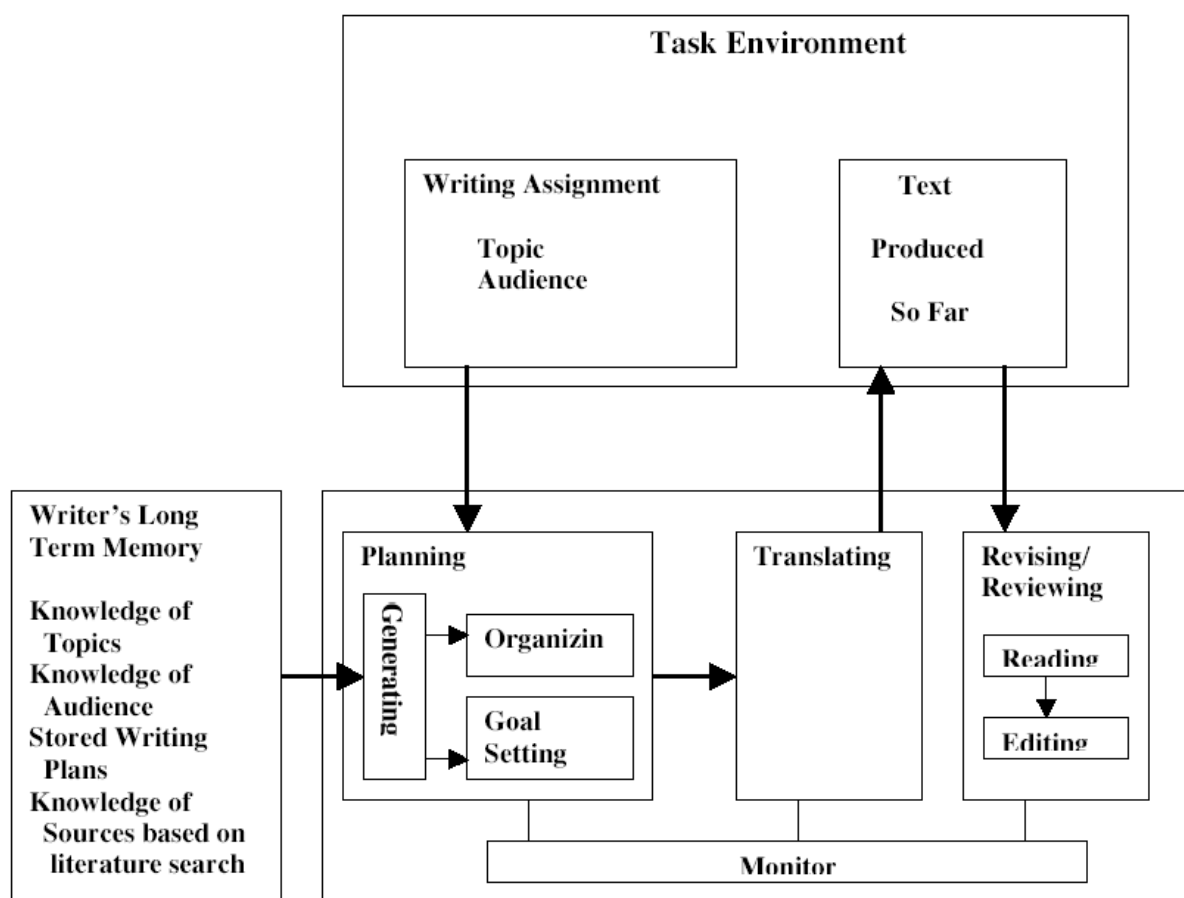
Fig. 1: Hayes and Flower's (1980) process model of writing (taken from images, Google)

Much of the process-oriented research on writing that has been done since then has had this model as a frame of reference. Also, the vocabulary fixed in this model has been the vocabulary most commonly used in dealing with the composing process, especially the three major processes of "planning, generating/translating, and revising/editing". Amongst these three processes, planning and revising have received the most attention. The process referred to as "translation" in the early model of Hayes and Flower (1980) and as "text production" in

Hayes' model of 1996 is more rarely mentioned in the research literature (see Wengelin, 2002, p 75, and Witte & Cherry, 1986, p 123).

Another model often mentioned is that of Bereiter and Scardamalia (1987). They see writing as being comprised of two qualitatively different processes i.e. "knowledge-telling" and "knowledge- transforming". This dichotomy may be compared to the concepts of "linear processing" (knowledge-telling) and "all-in-one processing" (knowledge-transforming), that Ransdell, Lavelle and Levy (2002) refer to. In comparing factors that can lead to good writing in L1 and L2, Ransdell et al. suggest that good writing is associated with all-at-once strategies characterized by continuous planning, text generation, and revision. Poor writing, on the other hand, would seem to be associated with step-by-step strategies i.e. planning first, then generating text and, finally, revising. The idea here is that non-linear processes (knowledge-transforming processes) change thinking. A revision is made on-line, which leads to another formulation, which leads to other associations, which leads to new ideas etc. This dichotomy between knowledge-telling and knowledge-transforming is also referred to in the studies dealing with working memory and writing (McCutchen, 1996, 2000).

2.1.2. The processing demands of writing:

Torrance and Galbraith (2006) refer to McCutchen's (1994) analogy of the writer as a switchboard operator, continually trying to coordinate inputs and outputs between different senders and receivers. In order for this high level of coordination to be achieved it is necessary to overcome some processing constraints. Torrance and Galbraith suggest that a writer aspiring to succeed at this high level of coordination should proceed as follows:

1. Practice low-level skills that have to do with transcription and spelling
2. Develop task- and domain-specific skills in order to maximise the efficient use of transient memory resources.
3. Take strategic steps such as preplanning, making notes, rough drafting, etc.

Let us now take a brief look at each of these strategies and the effect they might have on the writer's ability to overcome some of the processing constraints:

The automatization of low-level skills: It goes without saying that transcription proficiency should facilitate the task of writing. By the same token, a number of studies (e.g. Wengelin, 2006) have shown that if a writer has spelling difficulties this is likely to narrow down the

range of vocabulary used. Presumably, this would even more likely be the case in FL writing. Spelling difficulties can interfere with lexical retrieval processes and an active chain of thought might be broken, thus disturbing the higher-level process of creating coherence in the text. Also, mid-word pausing (for example due to spelling difficulties) "results in the loss of lexical items that are awaiting transcription but that are less common and therefore have a lower level of activation" (ibid, p 75). Therefore, spelling training might help overcome some constraints. Another factor that might help overcome processing constraints, especially for writers with learning difficulties, could be the use of assistive technology such as spelling checkers and word prediction software.

Efficient memory-management: In order to get to the end of a sentence without forgetting what it was that one intended to write, it is important not to be too easily distracted. Distractions might, for example, be in the form of irrelevant associations. Torrance et al. also refer here to Ransdell and Levy who contend that people with high reading comprehension skills (1999) or, writers who are multilingual (2001), have been found to be particularly good at suppressing information that is irrelevant to the task at hand. In his work of 1996, Hayes argues that reading practice provides a fertile ground for the development of writing skills. Most skilled readers show a greater versatility in shifting between various sub-processes than unskilled readers do. By the same token, practice in foreign language reading should facilitate the foreign language writing process. FL writers who lack sufficient knowledge of the foreign language are likely to interrupt their writing trying to find a linguistically suitable way to express their ideas more often and for longer than they would in their L1 (Chenoweth & Hayes, 2001).

The effects of writing strategies on processing demands: The choices which a writer makes with regard to divisions of the major task into subtasks and the ordering of the same (the writer's strategy) is likely to have important consequences for the writing process. It is unclear which strategy is the most effective and it surely depends on the task, the writer's personality, the genre, the modality, the social situation, the imagined reader, etc. Torrance and Galbraith argue for a dynamic model of the writing process. They claim that working memory capacity is dependent on task- and domain-specific memory management skills.

2.1.3. Comparisons between L1 and FL writing; writing profiles and 'signatures', similarities and differences:

Seminal empirical research on the relation between personality and writing has been carried out by Galbraith and Torrance (1996, 1999). Their tests were based on the intuitive assumption that some writers perform better under certain circumstances whereas other writers would perform better under other circumstances. They hypothesized that there would be a difference between writers they chose to call "high self-monitors" and so-called "low self-monitors". The former they describe as writers "…who control their expressive behaviour in order to present themselves desirably to others". This can be seen in extensive planning before writing. The latter they describe as writers who "… express their affective state directly", and plan in the course of writing.

 Not very much research has been done on writing profiles in general and even less research has been done with regard to the consistency (or lack thereof) of these profiles in L2 or FL writing. According to Ransdell, Lavelle, and Levy (2002), there had been no studies of "writing signature" (as they call writing profiles) data in L2 writing at the time of their study. A writing signature is "associated with persistent differences in writing quality and fluency" which largely depend on "…individual differences in working memory ability that promote or inhibit nonlinear processing" (Ransdell et al, 2002, p 135). They have studied the effects of the training of working memory strategy on writing performance among four subgroups of students, writing in either English as L1 or L2. They have thus not studied the consistency of individual writing profiles across languages as is the aim of this study. However, they found that there were clearly more similarities than differences when comparing the factors that can lead to good quality writing in L1 and L2. They also found that an all-at-once strategy facilitates higher fluency in both L1 and L2 writers.

As far as transferring writing skills from one language to another is concerned, the theoretical construct of Cummins (1980) (in Ransdell and Barbier, 2002) has been widely used. This is a notion of "common underlying proficiency" (basically meaning that there is a common set of abilities underlying both first and second language performance).

In her study of 2006, Spelman Miller found that L2 writers paused more frequently than L1 writers. The results of her study also showed that productivity and rate of production were lower in L2. "The task of producing texts appears to be slower and more effortful…" (Spelman Miller, 2006, p 143). This observation is supported by Thorson (2002)

who found that the participants in her study tended to write less in their foreign language (German) but revised proportionately more than when writing in their first language.

An interesting study of writing profiles is that of van Waes and Schellens (2003) in which they investigate the ways in which writing profiles are affected by "physical aspects of the task environment" specifically the use of a word processor vs. the use of pen and paper. They distinguished five writing profiles namely: 1) the *initial planner*, 2) the *fragmentary Stage I writer*, 3) the *Stage II writer,* 4) the *non-stop writer,* and 5) *the average writer.* They found that the adopted profiles depended largely on the constraints of the writing environment and that there was a strong tendency for writers to change their profile when they changed writing mode. The differences in the profiles were, amongst others, to be found in the following areas:

- The level at which revisions are made

- The way the revisions are distributed throughout the writing process

- The degree of fragmentation of the writing process.

(p 847)

The observational methods and research approach developed by Van Waes and Schellens can be very useful for this study. Where they have focused on revisions the focus in this study will rather be on pauses. In the same way as they investigate the ways in which writing profiles are affected by task environment, this study focuses on the way in which writing profiles change or remain consistent when writing in L1 and FL.

Hyönä, Lorch, and Kaakinen (2002) have investigated 'reading profiles' (using evidence from eye fixation patterns). They distinguished four qualitatively distinct reading strategies among competent adult readers: 1) *fast linear readers*, 2) *non-selective reviewers,* 3) *slow linear readers* and 4) *topic structure processors*. Hyönä et al argue that "…the particular global processing strategy adopted by a reader will surely have pervasive effects on micro-processing and on the nature of the mental representation constructed by the reader" (p 44), and thus on overall comprehension and recall. By the same token, different writing strategies will surely affect the overall writing process and product. Hyönä et al found that the 'topic structure processors' paid close attention to headings, had the largest working-memory capacity and showed the best comprehension and recall.

In sum, the study of writing profiles may help us uncover the effectiveness of certain strategies vis-a-vis other strategies which, in extension, can lead to more individualized and effective classroom instruction.

3. Research Questions

- What are the differences/similarities, with regard to the writing process, between L1 and FL writing?

  For example: Are the pauses to be found in the same types of location/the same textual levels in L1 and FL (see Wengelin 2002, 2006; Spelman Miller, 2006; and, with regard to location of revisions, van Waes & Schellens, 2003)?

- Are there individual profiles and, if so, do they remain consistent in FL writing? If not, in what way do they change?

- Is there a difference between the final edited L1 texts, on the one hand, and the final edited FL texts on the other hand?

  - Can the analysis tools used in the case studies (potential completion points and framing devices) enable us to gain an understanding of individual writing profiles and their consistency (or lack thereof) when writing in English as a foreign language?

Many investigations into processing behaviour are based on small numbers of subjects and may thus not readily reveal generalizable differences. This study is also limited in that respect and the more fine-grained qualitative analyses of four of the texts can merely provide us with some complementary information. A more comprehensive study using qualitative analyses of a greater number of texts would perhaps allow us to make some generalizations.

3.1. Predictions of outcome:

There will be no hypotheses stated in this paper since it is an exploratory study. However, on the basis of intuition, and taking into consideration the results of previous studies (e.g. Chenoweth and Hayes, 2001; Hyönä, Lorch, and Kaakinen, 2002; Ransdell, Lavelle, and Levy, 2002; Spelman Miller, 2006; Lindgren, 2005; Thorson, 2000; Van Waes and Schellens, 2003), the following predictions can be made:

a) There will be fewer tokens in the linear texts in English (FL) than in Swedish (L1).

b) The ratio of pausing time to total time will be greater in the English texts than in the Swedish texts (this may be interpreted as lower production and lower fluency).

c) More attention will be given to lower level concerns, such as spelling etc. in the FL texts. This, in turn, can be expected to increase the working memory load of the writer, thus leading to less cognitive capacity left to deal with higher level concerns, such as global planning.

d) There will be differences in the use of framing devices in L1 and FL. The nature of these differences remains to be seen. KSM hypothesized in her study (2006) that "… L2 writers of English will generate more simple subject theme pauses than L1 writers." (Spelman Miller, 2006, pg 141). Considering the near-L2 status of English as a foreign language in Sweden, one might expect the same outcome in this study. Spelman Miller found that L2 writers paused for longer at subject theme locations than at non-subject theme locations. "A possible interpretation of these findings is that the L2 writers appear to make use of the subject theme-framing device location to produce longer pauses, whereas in the case of the L1 writers, in general, the subject theme location does not attract substantial pausing" (Ibid, pg 145). However, there was a relatively high degree of variation in her data just as there is likely to be in mine.

   e) There will be fewer tokens in the final edited texts in English than in Swedish.

4. Method and Analyses

In this study narrative essays composed using the keystroke logging tool ScriptLog were analyzed quantitatively for comparisons between English and Swedish, and the texts of two of the subjects were analyzed qualitatively.

The quantitative analyses were analyses of productivity and fluency based on the statistics generated by ScriptLog.

The qualitative analyses, which were performed on the texts of two of the subjects were based on Spelman Miller's potential completion points and framing devices. The pause length chosen was 5 seconds and longer since pauses shorter than 5 seconds are mostly found at character and word potential points and seldom use framing devices to introduce topic. However, it is nonetheless of interest to examine the frequency of pauses between 2 and 5 seconds long. The analysis of the texts in the case studies can be seen as an attempt to find out whether or not these analytical tools would prove fruitful for the analysis of individual FL

writing profiles on a larger scale. Therefore, this part of the study may be regarded as a pilot study within the larger context.

4.1. Participants

The participants in this study were 30 high school students, (15-16 years old) with Swedish as their L1 and English as FL. They came from two different ninth grade classes and they have all had the same teachers in English and Swedish. The participants were asked to fill in a form with language details (see Appendix). They were also assigned an individual code on this form, such as, for example, 'cdefgh'. Those who had English as a home language or who had spent more than six weeks in an English speaking country were removed from the study. 21 students remained for the analysis. All of the subjects were informed that participation was voluntary, that they were free to leave the study at any time, and that their texts would be treated anonymously. They were asked to complete a form of consent as were their parents (see Appendix).

4.2. Data Collection

The data collected was as follows:

30 completed forms with questions pertaining to language spoken in the home, language learnt in other countries, etc (see Appendix)

60 narrative essays (30 in English, 30 in Swedish) on the topic: "When I saved someone's life or saved him/her from a tricky situation" or "When someone saved my life or saved me from a tricky situation."

30 completed questionnaires with questions pertaining to the test situation, reading and writing experience in English and Swedish etc (see Appendix). The participants were asked to fill in the questionnaires after having written both of the texts. These questionnaires were initially collected so as to provide information with regard to, for example, reading and writing habits in L1 and FL. However, during the progress of the study, a decision was made only to use the questionnaires with regard to the case studies. The information remains, nonetheless, and could be used in a future study, for example to investigate any eventual correlation between reading habits and writing performance.

The experiment took place on two separate occasions in the computer room in 'The Humanities Laboratory' in the 'Centre for Languages and Literature' (SOL) in Lund, Sweden. All of the computers (19 PCs) had ScriptLog installed.

The computers were prepared so that the windows for entry of personal details were open (see appendix for instruction sheet). The participants received oral, as well as written instructions.

Half of the group wrote in English first and the other half wrote in Swedish first.

They were given approximately half an hour in which to complete the task with quarter of an hour's break with refreshments in between.

The subjects have each received a certificate for their participation in the study.

The names assigned the subjects in the analyses are naturally fictitious.

Attention has not been paid to gender differences in this study.

4.3. Analyses

ScriptLog consists of three main modules: a module for implementing a text-writing task, a recording module for logging the writing activity, and an analysis module allowing the researcher/teacher/user to play back the recording in real time and to perform a number of analyses on the process. The quantitative analyses in this study are based on the statistics generated by ScriptLog.

4.3.1. Statistical analyses:

All of the statistical analyses were carried out in the SPSS statistics package.

- For the comparisons between L1 and FL writing, paired sample t-tests were performed.
- Correlation tests were conducted by means of Pearson's bi-variate correlation tests.
- A control for interaction effects between order and language was also done by means of two-way ANOVAs. No interaction effects were found and order will thus not be mentioned in the results.

4.3.2. Potential completion points:

These locations are called 'potential' because they are constantly open to alteration and adjustment by the writer. These points are defined with regard to their location at a number of levels:

- character completion points (XCP) – after a morpheme or non-morpheme, but at a point which does not constitute a word in that context (i.e., word-internal);
- word completion points (WCP) – after a recognisable word, but at a point, which does not constitute a phrase (i.e., phrase-internal);

- intermediate constituent completion points (ICP) – after a nominal, verbal , adverbial or adjectival group, which is recognisable as a complete phrase (also after non-nuclear elements such as disjuncts and conjuncts), but at a point which does not constitute a clause (i.e., clause-internal);

- clause completion points (CCP) – after a clause unit, but which is not marked as a sentence;

- sentence completion points (SCP) – after a unit marked as a complete sentence.

  (Spelman Miller, 2006, pg 133)

4.3.3. Framing Devices

Spelman Miller defines a framing device as "an element or structure (single word, phrase or clause) which serves to establish the starting point of the message at the clause/sentence level. A framing device may be used in one of a number of ways, either in constituting the topic itself, or in preparing the scene for the introduction of the topic" (Spelman Miller, 2006, p 136). There are five types of framing devices in the framework proposed by KSM fulfilling these functions:

- **subject theme** – consists of elements that are both grammatical subject and initial sentence constituent, e.g.:

  1) This hypothesis …   2) This is obvious …

- **adjunct theme/complement theme** – (often sentence-initial adverbials) – e.g.:

  1) Around puberty, …

  2) With reference to…

- **non-experiential theme** – e.g.:

  1) To start with, …

  2) Moving on to …

- **empty theme** (*it, what* and existential *there* structures) – e.g.:

  1) There are debates …

  2) What is needed …

- **thematic structure** (e.g., finite/non-finite clauses) – e.g.,

  1) If the teacher knows …

  2) Since I was a child …

5. Results

5.1. Quantitative Data:

5.1.1. Process data

As can be seen in Figure 2, there is a difference between the mean number of tokens in the linear texts in English as opposed to the Swedish texts.
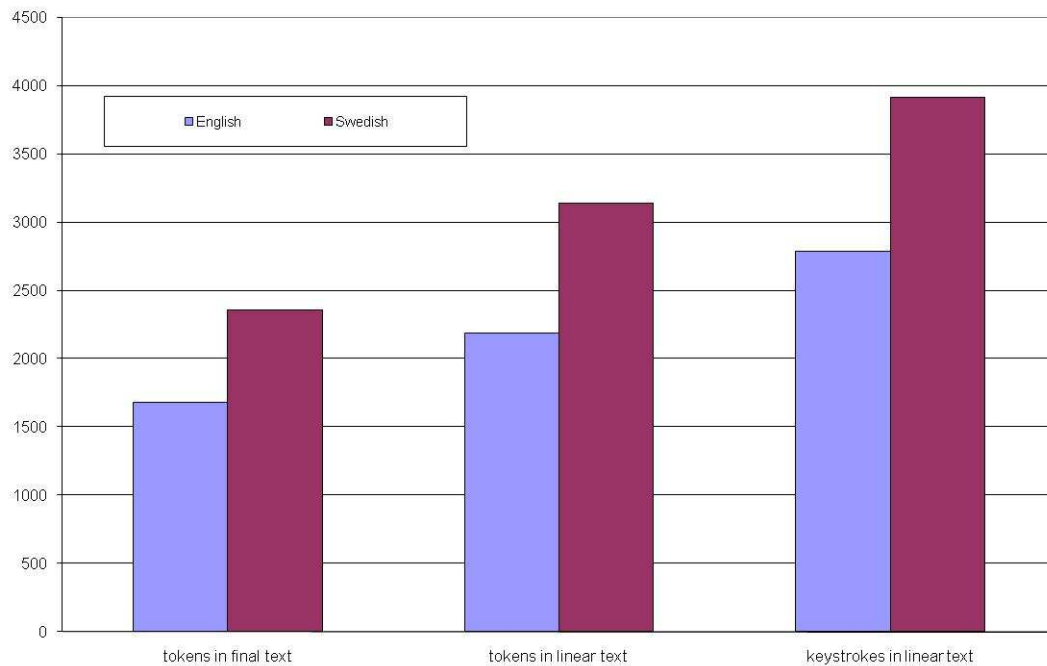
Fig. 2: Mean values of tokens in English and Swedish linear texts

Paired sample t-tests revealed a significant difference between L1 and FL writing with regard to the number of tokens in the linear texts ($t(20)=5.601$, $p=0.000$). This result reveals a quantitative difference in the writing process.

Figure 3 and Figure 4, below, illustrate the ratio of pausing time to total time in English and Swedish. A paired sample t-test revealed a significant difference between total pausing time and total time ($t(20)=-4.577$, $p=0.000$). No effect was found for the total time spent on the tasks in the two languages. Thus, although the amount of time spent on composing the texts in Swedish and in English was not significantly different, the productivity was. Pausing time was greater in FL and tokens were fewer. It is reasonable to conclude that cognitive load was greater in FL than in L1.

Figure 3: Ratio of pausing time to total time (calculated on the basis of pauses 2 seconds and longer) 1=English, 2=Swedish

Figure 4: Ratio of pausing time to total time (calculated on the basis of pauses that last for 5 seconds and longer).

Controls were done for interaction effects between order and language by means of two-way ANOVAs but no interaction effects were found.
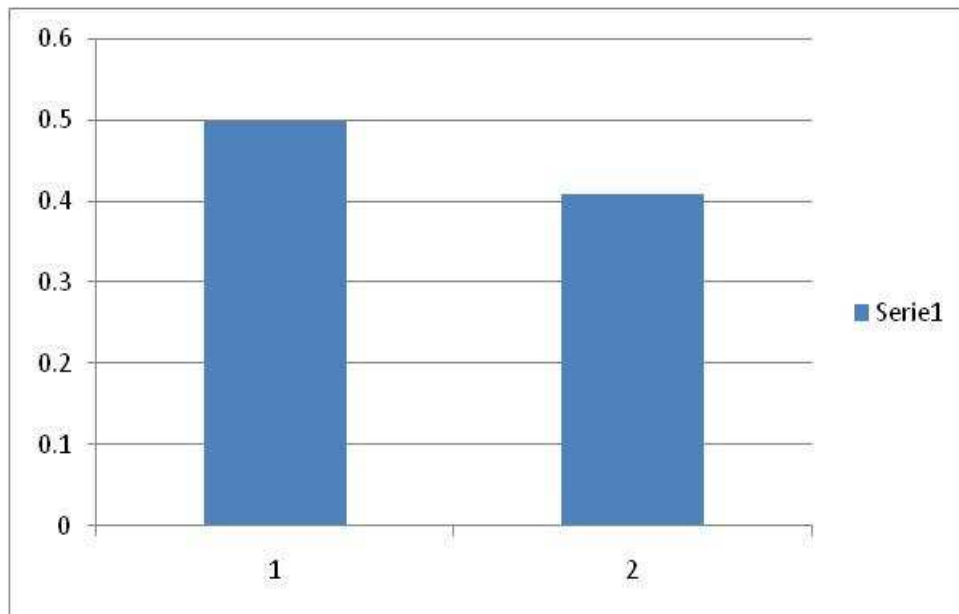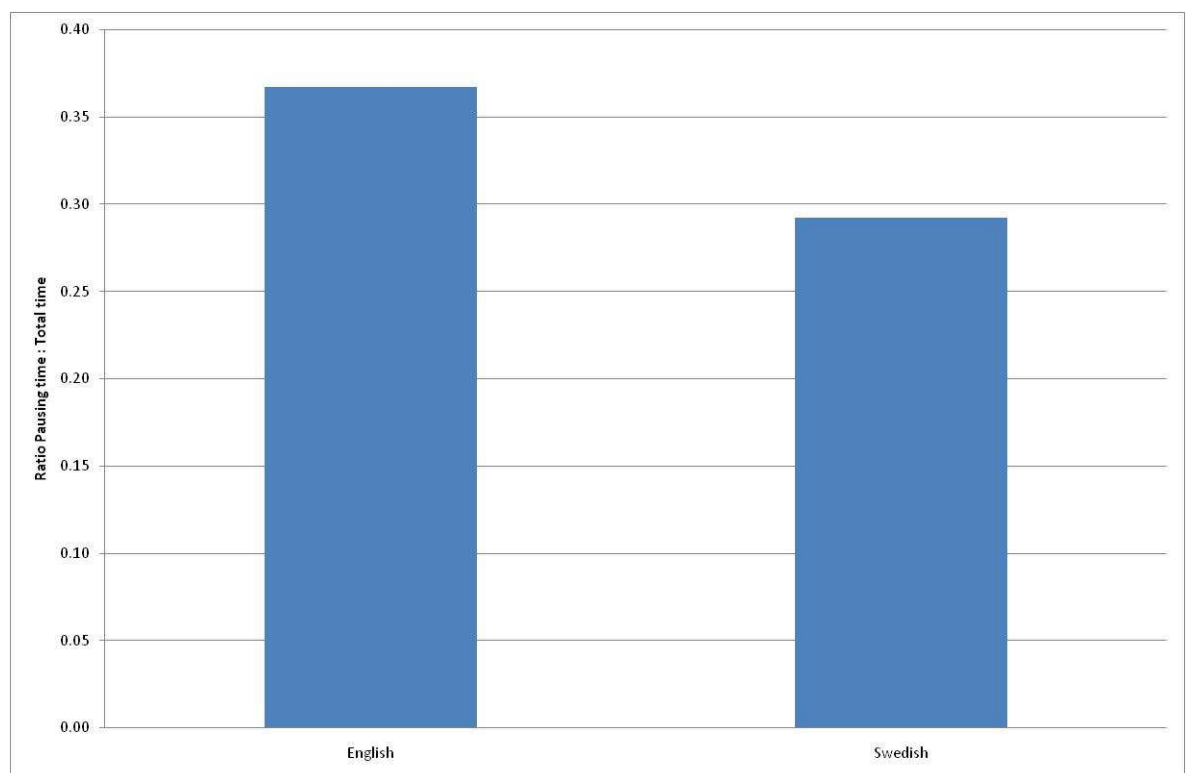
<u>5.1.2. Product data</u>

With regard to the number of tokens in the final texts (excluding one outlier) the result was also significant (t(19)=5.070, p=0.000) (See Figure 2 for the diagram showing the number of tokens in the final texts in English and Swedish respectively). However, length of texts perhaps tells us more about the process than it does about the product. A long text is not necessarily better. A more comprehensive study of product goes beyond the scope of this paper. Nevertheless, an attempt has been made to assess the four texts of the case studies.

5.2. The Case Studies: Subject Alec and Subject Dennis

The principal aims of this study are to investigate the similarities and differences between writing in L1 and writing in FL, and to investigate whether or not there are 'writing profiles' that remain consistent across languages. Another research question is whether or not the analysis tools used for this study enable us to gain an understanding of these issues. Does the use of these tools further a comprehension of the dynamics of writing in L1 and FL? The focus here has been on pauses and their relation to potential completion points and framing devices. The pauses studied here have been those that are longer than 5 seconds (a preliminary impressionist study of the shorter pauses shows that the majority are to be found at local levels). The subjects chosen for these analyses will be called Alec and Dennis. They both wrote about a situation in which they had been saved by somebody else or they themselves had saved someone (as did all the other participants). However, Dennis wrote two different stories which can perhaps give us some clues as to what remains consistent in spite of the two different stories and languages.

Some figures:	Alec, L1	Alec, FL	Dennis, L1	Dennis, FL
Tokens in final text	2957	2071	1990	1762
Tokens in linear text	3257	2275	3781	3461
Total time in minutes	29.12	22.29	31.49	32.25
Pause time, 5seconds and longer, in minutes	4	2.3	7.28	8.31
No.of pauses, 2-5 seconds	92	71	61	72
No. of pauses, 5-15 seconds	28	16	24	37
No. of pauses, >15seconds	1	2	8	7

Table 1: Tokens, times, and pause frequencies in Alec's and Dennis' L1 and FL texts respectively.

As we can see from the table above Alec and Dennis both wrote more in L1 than in FL. This is consistent with the other findings in the study. They are thus representative of the group in this regard. However, neither the frequency nor the length of pauses in Alec's writing is in accordance with the predictions of outcome. The analysis of potential completion points as well as some of Alec's answers in the questionnaire may provide us with a clue as to what Alec is paying attention to during these pauses (Alec wrote the Swedish text first).

	Alec, L1	Alec, FL	Dennis, L1	Dennis, FL
No. of pauses, 5-15 seconds				
SCP	15	2	10	9
CCP	3	3	2	3
ICP	4	3	6	11
WCP	6	7	4	8
XCP	-	1	2	4
No. of pauses, >15 seconds				
SCP	1	1	6	3
CCP	-	-	-	1
ICP	-	-	1	2
WCP	-	1	-	-
XCP	-	-	1	-

Table 2: No. of potential completion points co-occurring with pauses 5-15s and >15seconds

From the figures in Table 2 we can see that Alec paused significantly more at sentence completion points in L1 than he did in FL (15 times in Swedish and only twice in English). This gives us an indication that he paused proportionately more frequently at higher levels, i.e. topic management, than at lower levels such as word completion points in L1 than he did in FL. This finding is more consistent with the predictions of outcome than if we were only to look at pausing times and frequencies. The prediction referred to here is that FL writing is more cognitively demanding thus leaving less working memory capacity available for higher level activity. It was also interesting to note that potential completion points more often changed into other completion points in Alec's English text than in his Swedish text. His transition times were also longer in English. This could be due to not being able to find the keys as easily, although this phenomenon was not commonly found among the others. It could also be due to hesitancy, spelling difficulties, etc.

Let us now go on to studying the four texts individually.

5.2.1. Subject: Alec:

 (See Appendices for both the linear and the final edited texts)

Alec enjoyed participating in the experiment. He wrote that he found that thinking about what to write took longer than thinking about how to write it. He wrote the Swedish text first and, judging by the long pauses in the beginning, he seemed to take some time to plan.

Alec finds it easy to write in English and he reads a lot of books in English.

As mentioned in the method section, I have chosen to focus on pauses longer than 5 seconds and will give examples of pauses co-occurring with framing devices that either introduce a new topic or that contribute to the development of a topic:

 Starting with the Swedish text and looking at the location of pauses that are longer than 5s, we can trace the way in which Alec has primarily used the subject framing device at sentence completion points to introduce and develop the topic. For example:

1.   <START><0.24.093>- <u>VAD</u> har hänt, sa du<BACKSPACE7>?
*   <BACKSPACE9>sa du hade hänt?*

Alec started with a long pause (24 seconds) in which he was presumably planning what to write (a general assumption based, among other factors, on what he answered in the

questionnaire). He then wrote the first sentence which he proceeded to change by deleting, so instead of writing *"VAD_har hänt?"(WHAT happened?)* he wrote *"VAD sa du hade hänt?"(WHAT did you say had happened?)*

He reformulated the first question with a more effective formulation as a result. (In the English text he does not have this long pause, at least not after he has pressed the start button), but rather writes the question straight away. The next long pause is after the first sentence, at a sentence completion point and introducing a new topic using a subject theme framing device. I have chosen to add the two pauses and see them as one since there is only a backspacing of the return between them which he then altered after the next pause.

> 2. *<RETURN>-<0.07.016><BACKSPACE2><0.05.656><RETURN>*
> *- Er chef har blivit tagen som gisslan…*

The next long pause, also made up of two consecutive pauses is also at a sentence completion point and further elaborates the topic using device and a non-experiential theme:

> 4.*<0.06.422> <0.09.844><BACKSPACE><RETURN>- Och*
> *nä<BACKSPACE2>hur lång tid kommer det att ta?*

After some less important information, shorter pauses, backspaces, mouse events and deletions there is an answer to the question and a closure of the dialogue: First there is a conceptual change in the emerging text from "about a month" to "about a year". After the following pause which is at a sentence completion point and which uses a subject framing device, there is a change of topic and paragraph – "I had stopped listening". This can be interpreted (in accordance with KSM 2006, p 155) as awareness of paragraphs, and of the use of framing devices to introduce new topics.

> 6. *<RETURN><BACKSPACE> Så om ungefär en månad kanske…*
> *<RETURN><0.06.765><BACKSPACE><UP><RIGHT11><DELETE11>*
> *honom<0.05.875><DOWN><BACKSPACE19> ett halvår kanske…*
> *<RETURN><0.05.562><BACKSPACE> Jag hade slutat lyssna.*

Alec continues to give some background information and then, without a pause immediately preceding it, he writes a sentence that gives a new direction:

> 9. *Jag bestämde mig för att ta saken I egna hander.*

"I decided to take matters into my own hands". He continues to 'think aloud', using a subject framing device:

> 16. *<0.06.516>Vår fabrik hade fått första priset…*

Further on, after a long pause at a sentence completion point, before a new paragraph, introducing a new topic with a subject theme framing device: "I had a plan".

18. i.*<0.13.172><RETURN> Jag hade en plan.*

Other examples of pauses at sentence completion points, this time using the adjunct theme framing device:

20.i. *<0.06.734><RETURN>Klockan elva...*

21. *<0.09.203>När det blivit tyst igen...*

Further on once again a sentence completion point, a new topic, but this time introduced using a non-experiential theme framing device: *tydligen (apparently).*

<0.14.547>Tydligen fanns det en bomb inne i fabriken...

(Apparently there was a bomb inside the factory)

In this case the 'bomb' is the new topic being introduced.

25. *<0.06.453>Men att göra oss av med den....* (non-experiential theme)

26*. <0.06.375>Chefen hade en privat helikopter på taket....* (subject theme)

Finally:

30. <**0.05.281**><MOUSE EVENT>av chefen<**0.03.923**><END SCRIPTLOG

In the Swedish text a majority of the longer pauses (longer than 5 seconds) were at sentence completion points and nearly all introduced new topics or subtopics, mostly by using the subject framing device. There are no word internal potential completion points (that correspond with pauses longer than 5 seconds). This can be interpreted as Alec having the capacity, in the Swedish text, to overcome the processing constraints of lower level skills such as: transcription and spelling, task- and domain-specific skills, and that he takes strategic steps such as pre-planning (the abundance of pausing in the beginning of the text) (see Torrance & Galbraith, 2006). He seems to be aware of the reader, for example when he writes: "I had stopped listening" and then 'turns to the reader' in order to give the reader some more background information.

In comparison with the reading profiles of Hyönä et al (2002), Alec seems to have a partly developed "topic structure writing profile" (as compared with Hyönä et al.'s "topic structure reader".

In the final text there are six paragraphs, five of which are preceded by pauses longer than 5 seconds. There is no pause immediately preceding the third paragraph – "Jag avlägsnade

mig…" and, conversely, there is no new paragraph after the long pause before introducing the new topic 'bomb'.

Alec did not seem to have very much trouble writing the English text either. This is in conformity with Schoonen et al.'s findings (2003) that L2 "writing proficiency is highly correlated with L1 writing proficiency", as well as with Cummins' (1980) theoretical concept of "common underlying proficiency". Alec also reads a lot in English (see Ransdell et al., 2002, with regard to the relation between reading and writing proficiency). The main difference to be found between the writing processes in Swedish and in English, observed when studying the text in real time, as well as the correspondence of potential completion points and pauses longer than 5 seconds, was that Alec seemed to have difficulty finding the appropriate words in English. Two of these were preceded by longer pauses (in this case longer than 10 seconds) e.g. *<0.10.531>a rival company*, and *<0.024.109>Police Chief*. However, the pause before the Police Chief also preceded the introduction of a new topic. The pausing pattern is different in the English version.

In the English text there are 18 pauses longer than 5 seconds of which two are longer than 15 seconds: The first one of these longer pauses, as mentioned above, is to be found at a word completion point, introducing a new topic, the "Police Chief":

> *6.<RETURN>_<BACKSPACE>- Well, first the <**0.24.109**>Police Chief has to come back from his vacation on the moon, and then he will have to recruit a new police force…*

The second long pause is right at the end of the text before and after a number of mouse events and deletions. One can reasonably conclude that the writer is reading through the text and revising at this point.

> *25.<MOUSE EVENT>c<MOUSE EVENT> and got a huge bonus.*
> *<0.03.391><MOUSE EVENT><MOUSE EVENT><MOUSE*
> *EVENT>,<0.11.594><MOUSE* EVENT><**0.16.297**><MOUSE EVENT>
> (See linear text in Appendix)

After this section a few more mouse events, returns and deletions are recorded before the end button is pressed. All in all there are only three pauses that are longer than**<0.05.000>** (five seconds) to be found at sentence completion points.. There are three long pauses, adding up to 35 seconds at the end of the text, combined with many mouse events. The distribution of pauses in the two texts suggests a pattern of planning in the beginning of the Swedish text and revision at the end of the English text, as well as some backspacing, shorter pauses and

deletions around the middle. This partly recursive pattern seems to be somewhere in between the linear processing and the non-linear processing proposed by Ransdell et al (2002). In this analysis it is not seen as 'knowledge transforming' (see Bereiter & Scardamalia, 1987) in the full sense of the term, but then again it is a narrative text and the author seems to be clear about what he wants to write after the initial period of planning.

One notable difference between the writing processes in Swedish and English of this writer is the impression one gets when observing the emerging text in real time of a lower level of fluency in English. This writer seems to have some slight difficulties with accessing English words and possibly also with accessing the correct spelling, although this is not visible in the final edited text. As mentioned earlier, and as can be seen in the appendix, the final texts are very similar in Swedish and English (although the English text is quite a lot shorter) but the pausing pattern is not. There are far more pauses at higher levels, such as paragraph and sentence levels, in Swedish and at lower levels, such as word level in English. In the FL text there are only three pauses longer than 5 seconds that co-occur with sentence completion points and of these two are to be found between a number of mouse events at the end of the text. Of the five paragraphs in the final edited text none are preceded by pauses longer than 5 seconds in the linear text. In the final edited text in L1 five of six paragraphs were preceded by pauses longer than 5 seconds. Most of the pauses are to be found at character and word completions points. However the overall writing pattern seems to be quite similar in L1 and FL. In both of the texts there is a section in the middle with considerable backspacing, deletions and mouse events. The writing of the Swedish text seems to involve more planning in the beginning (working out what to write) whereas the writing of the English text seems to involve more revision at the end. This can be interpreted as a greater need to check the language in English. Less planning time in the beginning in the English text is probably due to the fact that Alec already knew what to write. Alec's writing in the Swedish text also seems to be more recursive and less linear than it does in the English text.

5.2.2. Subject Dennis:

(See Appendix for both the linear and the final edited texts)
Dennis wrote the English text first. He enjoyed participating in the experiment. Planning what to write took the longest time. He found writing the English text relatively easy. In answer to the questions on what was the most difficult or the easiest in the Swedish and the English texts respectively he wrote that the 'story' was the most difficult in both cases. In the Swedish

text spelling was the easiest and writing the ending was the easiest in the English text. If he couldn't find the right word in English he used another or other words. He thinks English is easy and he often uses English on the computer, when watching TV or films, and in connection with music, but he does not read very much in English.

General observations:

Dennis writes coherently in both the Swedish and the English texts. He seems to have an awareness of the reader, i.e. of the decontextualized nature of the writing situation. He introduces new topics so that the reader will be familiar with them and gives enough descriptive background for the reader to understand. He has an introductory and concluding paragraph in both texts. In both of the texts he wrote a lot, backspaced, deleted, and paused a lot before writing the sentence that would be the first sentence in the final edited text. So it seems that he uses a planning strategy in both languages.

In the English text Dennis wrote many sentences that were deleted, reformulated etc. and finally wrote the first sentence of the final edited text after 8 minutes. To introduce the whole text Dennis uses what KSM would call the non-experiential theme category of framing device:

> 11.*<BACKSPACE2>?!<**0.11.203**><BACKSPACE44><UP><LEFT>*
> *<RIGHT><DOWN><RIGHT<LEFT><RIGHT<LEFT6>again*
> *<BACKSPACE5><RIGHT26>*

> 12. *<RETURN2>*<u>*The whole thing starde*</u>*<BACKSPACE2>ted*

One can assume, by studying the linear text or the emerging text in real time, that he was trying to find a way to write an introductory sentence and paragraph. In the Swedish text Dennis wrote a lot of nonsense for the first two and a half minutes and then, after half a minute more he wrote his first sentence which came quite easily. My interpretation of the longer time spent initially in English is that Dennis found it difficult to find the appropriate formulation in English whereas this came quite quickly and easily to him in Swedish once he had set his mind to it. There are also marked differences between the two texts. This may or may not depend largely on the different nature of the stories.

The English text seems either to be based on personal experience or the experience of a peer. Out of the 44 pauses that are longer than 5 seconds, there are only 12 that occur at potential

sentence completion points and of these there are only 7 that are realized by subject framing devices. For example:

> 18. *<0.05.531>They offered me and Ben drugs and….*

And:

> 33. *<0.05.343>I became a big help for him….*

The framing device most commonly used by Dennis in the English text is that of the adjunct theme/complement theme i.e. new topics are introduced by sentence initial adverbials – mostly adverbials of time such as: After a few weeks …, One day… etc. Even negations of previous topics are introduced in this way, for example in the following sequence where a potential word completion point changes into a sentence completion point:

> 20. *qI   took   the   <0.42.313><BACKSPACE11>oSo   she*
> *<0.05.953>BACKSPACE7><RETURN2>The next day... we didn't say a*
> *word about the drugs. It seemed like it never happened..., etc.*

There does not seem to be a direct and general co-occurrence between these framing devices and pauses of any particular length or type. However, these framing devices are almost always preceded or followed, or both, by a number of backspaces, mouse events or else pauses. In some cases by all three of these, suggesting that a certain amount of both revision and planning takes place at these locations.

As was the case with the first sentence in the final text, the last sentence also starts with a non-experiential theme:

> 35. …..<**0.07.641**>*This whole story really put our friendship to a test.*

According to Witte and Cherry's (1986) analysis of framing strategies, Dennis uses the narrative framing strategy in the English text – "… Description of place (is) subordinated to narrative of events, experiences; e.g., first we went into the front hallway…" (pg131).

The Swedish text is about a car accident. Everything happens very quickly.

In the final edited text in Swedish there are very few nouns or pronouns that do not refer to or revolve around the first person singular, "I", the third person singular "he", or "the road", "the car", or "the hospital".

There are three paragraphs – the first one starts with – "Plötsligt stod en man mitt i vägen…". ("All of a sudden there was a man standing in the middle of the road"). The second paragraph starts with – "Jag sprang så snabbt jag kunde…". ("I ran as fast as I could…). The last paragraph starts with – "Jag satte mig i förarsätet"…". (I sat down in the driver's seat…").

In the paragraph starting with "a man", there are six instances of man or pronouns referring to man, and four instances of "I" or pronouns referring to I. In the paragraphs starting with "I" there are altogether twenty three instances of "I" or referrals to the same, as opposed to fifteen referrals to "a man".

The first sentence in the final edited text is preceded by (supposedly) a period of thinking and planning, while writing, pausing, and so forth, that lasts for 2.58 minutes and is then realized with the use of adjunct theme:

> 2.*Plötli<BACKSPACE2>sligt stod en man mitt i vägen.*

This is then followed by a pause at a sentence completion point and a subject theme - In the Swedish text the framing device primarily used is that of the subject theme – e.g.:

> 3.*<0.17.218>**Jag** tryckte så hart jag kunge<BACKSPACE2> på*
> *gasp<BACKSPACE4>bl<BACKSPACE>romspef<BACKSPACE>dalen*
> *men han var för nära.*

The first sentence of the second paragraph is preceded by a pause at a sentence completion point and is realized in the text using a subject framing device:

> 10.*<0.18.844>RETURN2>**Jag** <0.05.922><BACKSPACE4>Så*
> *<BACKSPACE3>**Jag** spa<BACKSPACE>rang så snabbt jag kunde*
> *ti<BACKSPACE>illbaka till min bvcBACKSPACE>il för*
> *<BACKSPACE3>d'r<BACKSPACE2>är min*
> *movi<BACKSPACE2>biltelefon fanns.*

The first sentence of the final paragraph is also preceded by a long pause at a sentence completion point and then realized by using a subject framing device:

> *<RETURN2><1.06.953>BACKSPACE2><RETURN2>**Jag** körde*
> *t<BACKSPACE7>h<BACKSPACE>satte mig io <BACKSPACE2> förar*
> *<BACKSPACE>sätet och <0.09.344><BACKSPACE4>och backade*
> *bild<BACKSPACE12>körde bilen tillbaka <BACKSPACE>,*
> *<BACKSPACE2> mot mannen, så nära det fi<BACKSPACE2>gick, och*
> *<BACKSPACE4>innan jag <BACKSPACE12>.*

Another example of a co-occurrence between a sentence completion point and subject framing device is to be found in the middle of the second paragraph:

> *<0.06.047>**Jag** va<BACKSPACE3> blav <BACKSPACE3>ebv*
> *>BACKSPACE3>b<BACKSPACE2>v tb<BACKSPACE>vungen att*

This is followed by a long pause, a lot of deletions and a new start, again at a sentence completion point and a subject framing device:

> *<0.20.203><BACKSPACE21>M<BACKSPACE>__Jag__ gick fg<BACKSPACE2>fram till mannen <BACKSPACE7>den medvetslösa menn<BACKSPACE3>annen för att kolla efter telefon <BACKSPACE>, men inte heller han hade någon <BACKSPACE2>p<BACKSPACE> på sig.*

All in all there are eight cases of co-occurrence between sentence completion points and subject framing devices, which is by far the dominant pattern in this text.

There are very many deletions, a lot of them being due to typing errors.

There are three main areas of "planning, monitoring, revision, editing", or whatever it is that occurs when there are long pauses, deletions and mouse events. We cannot be completely sure which process is involved. A tentative conclusion might be drawn, however, that this writer has a recursive writing pattern, or at least a developing recursive pattern, in L1.

There is a long section in the middle of the text where Dennis is possibly planning or monitoring and where there are plenty of backspaces, deletions, pauses and nonsense words.

These two texts do not confirm the prediction that writers will tend to use the subject framing device to a larger extent in their FL than in L1 (see KSM, 2006, p 146). On the contrary, I found the opposite to be true. However, this is just a sample and by no means representative, not necessarily even representative of this individual since the texts had quite a different character.

The styles are very different in the Swedish and English texts, but in both cases they seem appropriate to the topic. In the Swedish text everything happens very quickly and as such there is a predominance of verbs and adverbs.

As has been mentioned earlier, Dennis took a long time to get started in both of the texts, writing nonsense, backspacing, deleting, etc. However this procedure was quite a bit shorter in the Swedish text and was not carried out in the same way as in the English text. In the English text it seemed more like he was trying to get it right whereas in the Swedish text maybe he was thinking about the text but writing anything – like swear words etc. He did this for 2.58 minutes before he wrote the sentence that turned out to be the first sentence in the final edited text.

6. Discussion and Conclusions:

Have we learnt any more about the relationship between writing in L1 and FL and were the tools we used to analyze the texts sufficient? Let us first take a look at these results in relation to the research questions:

6.1. What are the differences/similarities with regard to the writing process, between L1 and FL writing?

As is apparent in previous studies (see for example, KSM, 2006; Lindgren, 2005; Thorson, 2000; Stevenson, 2005), the task of producing text seems to be both cognitively more effortful and slower in FL than in L1. This is also shown in the present study. As predicted, there were fewer tokens in the linear texts in FL than in L1. This difference was statistically significant (see t-test results in the previous section). Our case studies of Alec and Dennis show that they were representative of this pattern.

The ratio of pausing time to total time was greater in the English texts than in the Swedish texts (this may be interpreted as lower production and lower fluency). This finding was also statistically significant and confirms a prediction of outcome of this study as well as the predictions and findings of several other studies. However, in this regard, Alec was not representative. He paused proportionately more when writing the Swedish text than when writing the English text. It seems that in his case order might have had an effect. He wrote the Swedish text first and then used exactly the same story for the English text. Judging by the frequency of pauses at higher levels – sentence completion points – as opposed both to lower levels in Swedish and to the frequency of pauses at sentence completion points in English, it is reasonable to conclude that Alec paused more at conceptual levels in Swedish and at lexical levels (such as word choice and spelling) in English. Also, the longer transition times in English, and the intuitive conclusion arrived at while observing the process in real time, show that there was slightly less fluency when writing the English text than there was in the writing of the Swedish text. Alec also paused proportionately far more frequently at the word completion point in the FL text (8 out of 18 pauses longer than 5 seconds) than he did in the Swedish text (6 out of 29 pauses longer than 5 seconds). There were no character completion points in the Swedish text. In Dennis' case, pauses at the word level were also proportionately more frequent in the English text (11 out of 43) than in the Swedish text (4 out of 28). However, this is not a significant difference and can depend on a number of factors.

There were also differences in the use of framing devices in L1 and FL. In the case of Alec the subject frame device was by far the most commonly used framing device in the Swedish text. Alec's texts were very similar in Swedish and English and so was the use of framing devices, although the co-occurence of pauses was not. There were very few pauses at the sentence completion point in the FL text. Alec had more pauses at the lower level potential completion points in the English text than he did in the Swedish text, and by far more pauses at the sentence completion point in Swedish than in English.

In the case of Dennis there were longer pauses at sentence completion points and subject theme framing devices in the Swedish text. In the English text the adjunct theme was the most commonly used framing device while the non-experiential theme was used in the beginning and the end and was then preceded by a period of backspacing, mouse events, deletions, etc., but not as extensively directly by pauses.

The quantitative results of this study when analyzed across the whole group are consistent with the predictions of outcome, both with regard to the number of tokens in the linear texts and with regard to the ratio of pause time to total time. These results reasonably seem to indicate that the writing process in FL is more effortful than in L1, and that productivity and fluency were greater, in general, in the L1 texts than in the FL texts. The fact that there was no significant difference in the total time spent consolidates the prediction that writing in a foreign language is a cognitively taxing task compared to writing in L1. As has been mentioned previously, there were no interaction effects to be found in the statistical analyses between order and language, and therefore the order in which the tasks were performed was not taken into account. An extensive qualitative study of a much larger group of participants would allow us to arrive at a more generalizable conclusion with regard to similarities/differences between FL and L1 writing. In such a study it would be advisable to have peers perform the same analysis to improve reliability of the results.

6.2. Are there individual writing profiles and, if so, do they remain consistent in FL writing? If not, in what way do they change?

The correlation tests performed by means of Pearson's bi-variate analyses showed statistic significance with regard to tokens in the linear texts and the final texts, as well as with regard to the total time spent. That is, there was a correlation in the within-subjects analyses in Swedish and English. This indicates that there is some consistency in the writing profiles in L1 and FL.

The qualitative results were difficult to define and analyze. The analysis of potential completion points is by no means a simple and clear-cut task, particularly with regard to pauses at intermediate (i.e. phrase external/clause internal) vs. word completion points (i.e. phrase internal). It was also difficult to determine the type of completion point due to the numerous backspaces, deletions and mouse events preceding the pause.

I found it interesting to take a closer look at Dennis' texts even though the actual texts were so different. This difference was the result of a mistake on my part. I was asked whether or not the stories had to be exactly the same and I said that they did not, as long as the story was about the same theme. However, even though Dennis's texts were so different one could nonetheless see a similarity in the writing profile – with apparently (although we may never know for sure) "planning" in the beginning, some extra "revision and monitoring" in the middle and "editing" at the end. Both texts were divided into three paragraphs with an introductory paragraph in the beginning and a conclusive paragraph at the end – he used a narrative structure to be seen in the final product and, in the process a developing "knowledge-transforming" pattern of writing. In both of the texts, Dennis seemed to be aware of the reader. This could be seen in his way of introducing new topics or events and then elaborating further once the reader had been introduced. He was also consistent in his use of framing devices within each text. In the Swedish text he primarily used the subject theme framing device and in the English text he primarily used the adjunct theme framing device.

Alec is also consistent in his use of framing devices to introduce and develop new topics, and in this sense one can regard his profile as being consistent when writing in English as a foreign language. The difference in his pausing pattern may rather be assigned to difficulties at the lexical level in English. Since he already knew what he was going to write he did not pause as often at higher levels. He seemed to be aware of his reader and formed coherent texts both in English and in Swedish.

6.3. In general, is there a difference between the final edited L1 texts, on the one hand, and the FL texts on the other hand?

The prediction that there would be fewer tokens in the final edited texts in English than in Swedish was also borne out by the data. Considering the ratio of pausing time to total time it is a logical consequence that there would be fewer tokens in the final text in English than in Swedish. However, a shorter text in itself does not necessarily mean that it is a 'poorer' text. When it comes to the evaluation of 'good' vs. 'poor' writing as well as 'skilled' vs. 'unskilled

writers', there is undoubtedly a lack of consensus. In Sweden the most recent curriculum that has been drawn up by The Board of Education (Skolverket) for compulsory education is called LPO'94 and it entered into effect in 1994. LPO'94 states the following expected learning outcomes with regard to writing in English for ninth graders:

Pupils should

- be able to ask for and provide information in writing, as well as relate and describe something,
- be able to choose and use aids when reading texts, writing and in other language activities,
- be able, on their own and together with others, to plan and carry out work tasks, as well as draw conclusions from their work.

(See: http://www.skolverket.se)

The main focus in the subject of English is on all-round communicative skills. These goals are rather vague, but the assessment criteria for the grades equivalent to 'Pass', 'Very good' and 'Excellent' can be found on the following webpage: http://www.ped.gu.se/sol/ep9ex.htm.

Although the focus of this paper has been on the process rather than on the product, an attempt has been made at a general assessment of the texts written in English. As in the observations of Pennington and So (1993), it is indeed necessary for process and product to be separately assessed in order to gain a comprehensive measure of writing ability. A tentative assessment has been made of the four texts used for the case studies in accordance with the criteria put forward by the Board of Education. However, since these assessments were not very performed in a very precise manner I prefer not to include them here. Suffice it to say that both of the subjects would at least pass in English in the ninth grade in Sweden.

With regard to the number of tokens in the final texts both Alec and Dennis were representative of the group at large. Alec had 2071 tokens in the English text and 2957 tokens in the Swedish text while Dennis had 1762 tokens in the English, and 1990 tokens in the Swedish text.

6.4. Can the analysis tools used in the case studies (potential completion points and framing devices) enable us to gain an understanding of individual writing profiles and their consistency (or lack thereof) when writing in English as a foreign language?

I found these tools to be a step in the right direction (enabling a combination of a functional topic analysis of pauses). It was also interesting to study the correspondence of pauses and topic introduction in this way. However, as I have mentioned earlier it was difficult to be precise and I am not sure that the amount of work required reaps a comparable benefit. But perhaps this is a personal preference. In the event of using these tools for more extensive analyses it would be advisable to have more than one person performing the analyses so as to ensure reliability. The combination of these tools with the quantitative analyses, although providing more information than either type of analysis on its own, does not either really tell us what the writers are doing when they are pausing. Their off-line activity may not have anything whatsoever to do with the task at hand. A combination of these tools with, for example, eye-tracking, stimulated recall or collaboration with peers might prove more fruitful. The analyses of profiles performed by van Waes et al. (2003) and Hyönä et al. (2002) were based on cluster analyses which I think could also be a productive route to take. However there would be a need for a far more extensive and comprehensive data collection than was the case in this study in order for a cluster analysis to be applicable.

Findings from the analyses of individual writing episodes i.e. potential completion points and framing devices, may be of interest and use to the individual writer and teacher, even though these results may not be statistically significant. This information can be useful as a point of departure for learner-tutor as well as learner-learner discussions in a collaborative learning environment. They may help lead to an awareness of difficulties, use of strategies, potential aids etc. Above all, these insights can raise the awareness among writers of the processes of writing in general and foreign language writing in particular. According to Spelman Miller (2000b), the interpretation of location from a topic related perspective gives an added dimension to the determination of which elements in the text have the function of establishing or developing the topic of the discourse. However, there need to be many more studies of this kind in order to be able to draw any general conclusions regarding writing profiles in L1 and FL. On the individual level if one finds that a writer frequently pauses at sentence completion points then one should give instructional support with regard to the activity of planning. For example, if the writer develops an awareness of the notion of the conceptual paragraph this is likely to alleviate sentence-level planning pressures and, in so doing, help to increase fluency and productivity (ibid). Frequent pauses at potential character or word completion points indicates difficulties with low level concerns such as spelling, etc.

According to KSM (2006), some features of Hyland's scheme (in KSM, 2006) overlap or crosscut some of the framing devices proposed by the former. These features are for example, "hedging (*it may be that*), emphatics (*it is obvious, definitely, of course*), relational markers (*it is seen that*), and person markers (*we report*)" (KSM, 2006, p 155). On the other hand, focus on these features would lead the analysis of data in the direction of a discussion of "…the different social practices of disciplinary communities in constructing knowledge" (Hyland, p 121 in KSM 2006, p 155). Thus, although these features seem very similar to framing devices they nevertheless lead to results of a very different, though not uncomplimentary nature. The focus of the study of framing devices is on topic introduction and continuation. Awareness of such constructions might promote among learners an awareness of the impact of such devices on the progression and coherence of the whole text.

7. Future Research

This study has focused on the cognitive processes of writing, and the socio-cultural and emotional processes have not been considered. Such a concentration on one specific area can be valuable from a point of view of research but if one is to take the process one step further and think of ways in which one can support these cognitive processes then one needs to take an inclusive rather than an exclusive perspective.

Since the study of writing is such a complex field there are bound to be a number of contradictory studies, results and conclusions. However, one view that the majority of theorists seem to have in common is that writing is indeed a complex, time-consuming, cognitively demanding activity. Writing in a foreign language is naturally even more complex. Another aspect which seems to be relatively uncontroversial is that this demanding activity can be facilitated by learning some skills, such as typing/handwriting, spelling, lexical retrieval etc. (Schoonen et al., 2003; Snellings et al., 2002). Finding the best way in which to enhance efficient lexical retrieval however, seems to be a more complex achievement. Perhaps insights gained from research being done with imaging techniques in which one has focused on encoding and retrieval structures could provide some direction (see Wagner, Koutstaal, and Schacter, 1999). Some training of specific strategies designed for particular individual needs should prove fruitful. Individually adapted training of key skills is also likely to improve students' motivation and self-efficacy. By studying various patterns of writing behaviour in L1 and FL with the use of, for example, ScriptLog, KSM's analysis

tools and stimulated recall, one might be able to discern the individuals' strengths and weaknesses and, in so doing, be able to strengthen them where they are weak and help them become aware of their strengths. Spelman Miller has recently (2007) co-authored a study together with Lindgren, Sullivan, and Lindgren. In this study the tool for visualization and data mining, GIS, has been used together with framing devices to show how one can "… support analysis of the interaction of cognitive processes during writing focusing on the individual writer, differences between writers or the writing processes in general" (p 83).

A discourse analysis of the final product with the intention of studying lexical cohesion and lexical diversity could also provide valuable information. The computation of lexical chains, i.e. chains of words that are semantically related, can also show us how the writer creates continuity in the text. This textual analysis (of the product) could perhaps be combined with the analysis of framing devices (of the process) which would facilitate a greater awareness of the creation of coherence in texts. The notion of lexical chains is based on work by Halliday and Hasan (1976), further developed by Morris and Hirst (1991), and computationally applied in the program 'Lextrack' by Carthy & Sherwood-Smith (2002). See also Nilsson-Posada (1998) for a manual application of the notion of lexical chains in spoken monologue.

Perhaps research focusing on the interaction between cognitive processes and text may give us some idea of how to connect with research being done from a more socio-contextual perspective. In one of the studies in Lindgren's thesis a learning method called peer-based intervention (PBI) is used as a tool for reflection and discussion based on the keystroke logged data. "PBI includes writers' observations of how they undertook a writing task as well as observation of how a peer solved the same task" (Lindgren, 2005, p 32). The results show that students who are guided to discuss with peers and reflect on their own and other's work become more self-confident and more aware of both linguistic and extra-linguistic features. Proficiency in self-assessment and reflection on one's own work is intrinsic in all successful learning (see also Sullivan and Lindgren (2002) for work with adults).

I would also like to refer here to Strömqvist, Holmqvist, Johansson, Karlsson, and Wengelin (2006) and their vision of "… a searchable, web-based archive of online writing data from writers of different languages, age-groups and abilities, …" (p 71). Data collected in the present study could be added to such an archive. Collaboration between school pupils and college students from different cultures with different languages is alleviated by the existence of networks such as eTwinning (see http://britishcouncil.org/etwinning.htm).

Another idea for future research would be the further development of software in order to help students overcome difficulties that become apparent when using keystroke logging and so help them to develop greater fluency in FL or L2 writing. If, for example, one were to specify a number of different problem areas in foreign language writing one could then perhaps develop interactive educative programs to support learners with these difficulties. Essential to these programs would, I believe, be the issue of motivation and self-efficacy. These are vital components in all learning situations. The notion of self-efficacy can be defined as people's beliefs that they are capable of producing designated levels of performance for a specific task (see Bandura, 1997). The development of self-efficacy in writing has been studied by, amongst others, Braaksma, Rijlaarsdam and Van den Bergh (2002); Pajares and Valiante (2007); Torrance, Fidalgo, and Garcia (2007); and, Zimmerman and Kitsantas (2002).

Finally, when working with this paper I have become more and more convinced that in order to underline support academic development at all levels (i.e. also among children with learning difficulties, or rather, especially among children with learning difficulties, or, as in this case, among students writing in a foreign language), one needs to take an inclusive rather than an exclusive approach. That is, one needs to take into account socio-cultural as well as cognitive factors. An approach that I believe would provide the right kind of support would be that of observational learning, with emulation, and regular and constructive feedback.

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APPENDIX 1

Deltagande i undersökningen om skrivprocessen 8/3, humanistlabbet, SOL-centrum, Lunds Universitet:

Hej!

Jag heter Christina och jag läser språkvetenskap vid Lunds Universitet. Jag skall skriva en uppsats om skrivprocessen på svenska (som första språk) och engelska (som främmande språk). Jag skulle verkligen uppskatta om du skulle vilja vara med i den här studien.

Det är helt frivilligt, du får vara anonym, och du får avbryta när som helst.

Du kommer att få intyg efteråt om att du har varit med i undersökningen.

Om du vill vara med behöver jag få tillbaka den ifyllda talongen så snart som möjligt. Du kan lämna den till xxx (senast mån 5/3).

TACK!

Christina Nilsson-Posada
Lund, 2007-02-20

_____

Jag har fått information om att:

– jag får vara anonym

– det är frivilligt att delta

– jag får avbryta när som helst

– att materialet kommer att användas i Christinas uppsats och som underlag för vidare forskning

Namn:_____

Underskrift:_____

Ort och datum:_____

APPENDIX 2

Till alla föräldrar med barn som går i nian på xxx

Hej!

Jag heter Christina Nilsson-Posada och jag läser lingvistik vid Lunds Universitet. Jag skall skriva en magisteruppsats om skrivprocessen och är då framförallt intresserad av att studera skillnaderna mellan processen på det första språket och på ett främmande språk (i det här fallet, svenska och engelska).

Jag ber nu om **Er tillåtelse** att genomföra en undersökning med Er son/dotter (under förutsättning att han/hon själv är intresserad av att delta).

Eleverna kommer att få skriva en text på svenska och en text på engelska. Undersökningen äger rum i datorsalen i humanistlaboratoriet på SOL-centrum (Språk- och litteraturcentrum vid Lunds Universitet) 2007-03-08.

OBS! Detta är frivilligt för eleverna och uppgifterna skall behandlas anonymt.

Min förhoppning är naturligtvis att så många som möjligt vill vara med i studien.

Jag vore tacksam om ni kunde fylla i den medföljande talongen och lämna den till xxx **senast måndag 5/3.** Om Ni har några frågor är Ni välkomna att ta kontakt med mig eller med min handledare, Åsa Wengelin:

Christina Nilsson-Posada   Åsa Wengelin, Ph.D.
046-24 84 41 (hem eller fax)   Inst. för Lingvistik, Lunds Universitet
0730-33 23 19 (mobil)   046-222 8449, 046-222 4210 (fax)
nilsson_posada@msn.com   Asa.Wengelin@ling.lu.se

Tack på förhand!
Med vänliga hälsningar,

Christina Nilsson-Posada
LUND, 2007-02-20

Appendix 3

Instruktioner:

På skärmen framför dig finns en ruta som ser ut ungefär så här:

Fyll i det som fattas, tryck på OK och <u>VÄNTA!</u> Läs sedan vidare nedanför den här rutan.

Uppgiften:

Du skall skriva en berättelse på <u>svenska</u> om en situation då du hjälpte någon annan eller någon annan hjälpte dig. Det kan handla om att hjälpa någon ur en besvärlig situation, eller att rädda livet på någon. Berättelsen behöver inte vara sann, du får hitta på någonting om du vill. Det kan gärna vara fantasifullt men känn dig inte pressad! Det behöver inte vara märkvärdigt på något sätt. Kom ihåg att det inte är någon som kommer att döma dig, eller din stavning, grammatik mm. Det enda jag vill, är att du gör ditt bästa!

Tryck på Startknappen – OBS! BARA EN GÅNG! Nu kan du börja med att tänka och skriva. När du känner dig helt färdig klicka på Endknappen – OBS! BARA EN GÅNG!

Tack, och lycka till!   Christina

Appendix 4a

Alec, final edited text, Swedish

-VAD sa du hade hänt? sa jag till mannen som stod framför ingången

till strumpfabriken där jag arbetade.

- Er chef har blivit tagen som gisslan av er konkurrent Raggsockor AB
och är inne i fabriken tillsammans med deras utsända specialtrupper.
Ingen får komma in i fabriken förrän polisen har kommit och löst
situationen.
- Och hur lång tid kommer det att ta? frågade en annan arbetare.
- Jag vet inte riktigt. Först måste polischefen komma tillbaka från sin
semester på månen och sedan måste han anställa nya poliser, eftersom
de förra blev avskedade efter att ha vunnit över honom i fia med
knuff. Så om ungefär ett halvår kanske...
Jag hade slutat lyssna. Varför kunde de inte ha väntat till imorgon?
Idag var dagen då jag skulle ha blivit befordrad till tredje
maskinistassistent. Med tanke på ineffektiviteten hos stadens poliskår
var uppskattningen ett halvår antagligen alldeles för kort tid. Jag
bestämde mig för att ta saken i egna händer.
Jag avlägsnade mig från gruppen med upprörda arbetare och smög
runt till baksidan av fabriken. Som jag hade väntat mig var bakdörren
låst, men jag såg ett öppet fönster på tredje våningen. I trots mot allt
mitt sunda förnuft började jag klättra, men eftersom väggen var av en
sorts helt slät plast som dessutom nyligen blivit tvättad med såpa, gav
jag snart upp. Tydligen var att klättra omöjligt.
Jag kom dock snart på en ny idé. Vår fabrik hade fått förstapriset i
Fabriksgalan i kategorin "Flest soptunnor på baksidan" med 145 st.
Jag kom på att jag kunde stapla soptunnorna i en pyramid och på så
sätt komma upp. Mot alla förväntningar lyckades det och jag var inne
i fabriken.
Jag hade en plan. Jag kom ihåg att när jag hade varit på
ansällningsintervjuer hos de olika företagen hade jag lagt märke till att
hos Raggsockor AB hade alla anställda haft kafferast vid exakt samma
tidpunkt, klockan elva. Nu var klockan arton minuter över tio och jag
gömde mig i en låda strumpor som paketerats för sändning till affären

för att vänta.

Klockan elva hörde jag flera personer gå mot fikarummet. När det blivit tyst igen smög jag mot chefens kontor och öppnade dörren, som vakterna tydligen hade glömt att låsa. Jag förklarade snabbt situationen för chefen, som berättade att vi behövde göra en sak till innan vi tog oss ut. Tydligen fanns det en bomb inne i fabriken, som vi behövde hitta och göra oss av med på något sätt. Att hitta den var inga problem, den fanns i chefens skrivbordslåda. Men att göra oss av med den utan att den exploderade var ett större problem.

Efter en stunds tänkande kom jag på en lösning. Chefen hade en privat helikopter på taket, dit vi smög oss upp. Sedan flög vi ut över den närliggande sjön och släppte bomben där. När specialtrupperna från Raggsockor AB upptäckte att varken chefen eller bomben fanns kvar försvann de snabbt från landet för att unvika vreden från deras chef. Som tack för min hjälp blev jag befordrad av chefeninte bara till tredje, utan till andra maskinassistent.

Appendix 4b

Alec, linear file, Swedish, showing pauses longer than 5seconds

1. `<START><0.24.093>-VAD har hänt, sa du<BACKSPACE7>?<BACKSPACE9>sa du hade hänt? sa jag till mannen som stod framför ingången till strumpfabriken nä<BACKSPACE2>där jag arbetade.`

2. `<RETURN>-<0.07.016><BACKSPACE2> <0.05.125><RETURN>- Er chef har blivit tagen som giss<BACKSPACE24>ar blivit tagen som gisslan av er konkurretn<BACKSPACE2>nt och är <0.05.656>i<BACKSPACE8>Ragg-sockor AB och är <BACKSPACE2>r inne i fabriken tillsammans med <0.06.329>deras utsända specialkommando<BACKSPACE12>cialtrupper.`

3. `A<BACKSPACE>Ingen får komma in i fabriken förrän polisen har kommit och löst situationen.`

4. `<0.06.422> <0.09.844><BACKSPACE><RETURN>- Och nä<BACKSPACE2>hur lång tid kommer det att ta? frågade en annan arbetare.`

5. `<RETURN>- Jag vet inte riktigt. Först måste polischefen komma tillbaka från sin semester på månen och sedan måste han anställa nya poliser, eftersm<BACKSPACE>om de förra <0.05.188>blev avskedade efter att ha vunnit över polischefen i fia med knuff.`

6. `<RETURN><BACKSPACE> Så om ungefär en månad kanske...<RETURN><0.06.765><BACKSPACE><UP><RIGHT11><DELETE11>honom<0.05.875><D`

OWN><BACKSPACE19> ett halvår kanske...<RETURN>-
<0.05.562><BACKSPACE2>Jag hade slutat lyssna.

7. Med tan<BACKSPACE7>Varfrö<BACKSPACE2>ör kunde de inte ha väntat
   till imorgon? Idag var dagen då jag skulle ha blivit befordrad
   f<BACKSPACE>till <0.06.047>h<BACKSPACE>förste maskinist.

8. Med tanke på hur
   <BACKSPACE4>staden<BACKSPACE6>eneffektivitet<LEFT14><RIGHT><BACKSP
   ACE>i<END>en hos stadens poliskår var <0.08.547>uppskattningen ett
   halvår antagligen alldeles för kort tid.

9. Jag bestämde mig för att ta saken i egna händer.

        i. <RETURN>Jag avlägsnade mig från gruppen med upprörda
            arbetare <0.07.454>och smög runt till baksidan av fa-
            briken.

10.En <BACKSPACE3>Som jag hade väntat mig var bakdörren låst, men jag
   såg ett öppet fönster på tredje våningen.

11.I trotr <BACKSPACE2>s mot mitt
   sunda<BACKSPACE5>förnuf<BACKSPACE11>allt mitt
   sunt<0.11.8>75<BACKSPACE>da förnuft<0.05.359> klättrade
   <BACKSPACE10>började jag klättra <BACKSPACE>, men efter som väggen
   var av en ny s<BACKSPACE4>sorts helt<BACKSPACE4>pl<BACKSPACE2>helt
   slät plast som dessutom nyligen blivit tvättad med såpa,<MOUSE
   EVENT><BACKSPACE><MOUSE EVENT><MOUSE EVENT> gav jag snart
   uu<BACKSPACE>pp.

12.ö<BACKSPACE>

13.<RETURN><BACKSPACE>Tydligen var att klättra <BACKSPACE> omöjligt.

14.<RETURN><BACKSPACE>

15.<RETURN>S<BACKSPACE>Jag kom dock snart på en ny idé.

16.<0.06.516>Vår fabrik hade fått förstapriset i Fabriksgalan i kate-
   gorin "Flest soptunnor på baksidan" <0.07.594><BACKSPACE> med 145
   st.

17.Jag kom på att jag kunde stapla soptunnorna i en
   pyrmad<BACKSPACE3>amid och på så sätt komma uppp<BACKSPACE>.

18.Mot alla förväntningar lyckades det och jag var inne i fabriken.

        i. <0.13.172><RETURN>Jag hade en plan.

19.När jag hade v<BACKSPACE14>Jag kom ihåg från när jag hade varit på
   ansällningsintervjuer på <BACKSPACE3>hg<BACKSPACE>os de olika fö-
   retagen hade jag la<MOUSE EVENT>att<MOUSE EVENT><BACKSPACE>egat
   <BACKSPACE5>agt märke till att hos Raggsockor AB hade
   alla<0.05.984> anställda haft kaffe <BACKSPACE>rast vid exakt sam-
   ma tidpunkt, klockan elva.

20. Nu var klockan <0.07.719>fe<BACKSPACE2>arton minuter över
    et<BACKSPACE2>tio och jag gömde mig b<BACKSPACE>i en låda strumpor
    som paketerats för sändning till affären för att vänta.

    i. <0.06.734><RETURN>Klockan elva hörde jag en <MOUSE
       EVENT>tredje<MOUSE EVENT>assistent<MOUSE
       EVENT><0.06.922><BACKSPACE3>p<BACKSPACE>flera personer
       gå mot fikarummet.

21. <0.09.203>När det blivit tyst igen smög jag mot chefens kontor
    och<0.05.110><BACKSPACE>h öppnade dörren, som vakterna tydligen
    hade glömt att låsa Chefe<BACKSPACE6>.

22. Jag förklarr<BACKSPACE>ade snabbt situationen för chefen, som be-
    rättade att vi behövde göra en sak till innan vi tog oss ut.

23. <0.14.547>Tydligen fanns det en bomb inne i fabriken <BACKSPACE>
    <BACKSPACE>, som<BACKSPACE>m vi behövde hitta och göra oss av med
    på något sätt.

24. Att hg<BACKSPACE>itta den var inga problem, den fanns i chefens
    skrivbordslåda.

25. <0.06.453>Men att göra oss av med dne<BACKSPACE2>en utan att den
    exploderade var ett större problem.

    i. <0.06.140><RETURN>Efter en stunds tänkande kom jag på
       en lösning.

26. <0.06.375>Chefen hade en privat helikopter på taket, dit vi smög
    oss upp.

27. Sedan <0.06.297>k<BACKSPACE>flög vi ut över den
    närliggna<BACKSPACE2>ad<BACKSPACE>nde sjön och släppte bomben där.

28. När Special<BACKSPACE7>specialtrupperna från Raggsockor AB upp-
    täckte att varken chefen eller bomben fanns kvar blev <BACKSPACE>
    de så snopna att de <BACKSPACE30>kvar
    förc<BACKSPACE>sv<BACKSPACE>vann de snabbt från fa<BACKSPACE2>lan-
    det för att unvika vreden från derra<BACKSPACE2>as chef.

29. Som tack för min hjälp blev jag befordrad t<BACKSPACE>inte bara
    till tredje, utan till andra maskinassistent.

30. <0.05.281><MOUSE EVENT>av chefen

Appendix 4c

Alec, final edited text, English

-WHAT did you say had happened? I almost screamed at the man standing before the doors of the sock factory where I worked.
- Your boss has been taken hostage by a rival company and is being held inside the factory. Nobody is allowed inside before the police arrives and solves this situation.
- And how long will that take? asked one of the other workers.
on the moon, and then he will have to recruit a new police force. So in about half a year...
- Why does he need a new police force?
- He fired the old one after he lost to one of the policemen in tic-tac-toe.
I had stopped listening. Why today of all days? Today was the day when I was going to be promoted to third sock counter's assistant, and since the police force was the most incompetent in the country, the estimate of half a year would most likely be far below what it really would take. I decided that it was time for me to do something myself.
I sneaked around to the other side of the factory. Exactly as I had thought, the back door was locked, but I saw an open window on the third floor. I tried climbing up to it, but since the wall was made of a new kind of perfectly flat, non-stick plastic, I couldn't even get up a centimetre. So climbing was out of the question.
Then, I had another idea. Our factory had a huge number of big garbage cans standing behind it. I managed to put them in a pile which looked almost, but not entirely, unlike a pyramid. I managed to climb it up to the open window. At last I was inside.
I had a plan. I had read in a newspaper article about the rival factory that they always had their coffee break at the exact time of 11.00. Now my watch showed 10.18 and I hid behind a sock-making machine to wait.
At exactly eleven o' clock I heard steps going towards the lunch room. When the steps had faded I ran quickly to the boss's room and we escaped in the boss's personal helicopter which stood parked on the roof. For my help, I got promoted not to third, but second sock counter's assistant, and got a huge bonus.

Appendix 4d

Alec, linear file, English, showing pauses longer than 5seconds

1. <START>Wha<BACKSPACE3>-WHAT did you say had happened?

2. i almost <BACKSPACE9>I almost screamed at the man standing before the factory doors.

3. <RETURN>- Your boss has been taken hostage by <0.10.531>a rival company<MOUSE EVENT>doors of the sock factary <BACKSPACE4>ory where I worked.<MOUSE EVENT><0.05.375>, <BACKSPACE2> and i sb<BACKSPACE3>s being held inside the factory.

4. Noone is allowed inside before the police arrives and so<BACKSPACE2>solves this siti<BACKSPACE>uation.

5. <RETURN>- And how long will that take? asked one of the other workers.

6. <RETURN>_<BACKSPACE>- Well, first the <0.24.109>Police Chief has to come back from his vacation on the moon, and then he will have to recruit a new police force <BACKSPACE> <0.05.968><BACKSPACE>...<RETURN>_ Why does he need a new police force<LEFT30><HOME><DELETE>_<BACKSPACE>-<END>?<RETURN>- He fired the old i<BACKSPACE>one sft<BACKSPACE3>after he lost to one of the policemen in tic-tac <BACKSPACE>-toe...<MOUSE EVENT><BACKSPACE><RETURN><MOUSE EVENT><RETURN>I had stopped lis-tening.

7. Why today of all days?

8. Today i <BACKSPACE2>I was going to be promoted to third machin-ist<0.06.875><BACKSPACE9>machin ass<LEFT4>e<END>istant.

9. W<BACKSPACE><MOUSE EVENT> <MOUSE EVENT>was the day when a<BACK-SPACE>I <BACKSPACE2><MOUSE EVENT><0.05.375><MOUSE EVENT>sock coun-ter's<MOUSE EVENT>Couldn't they had <BACKSPACE21>s? <DOWN><0.05.000><RIGHT16><BACKSPACE2>, and since the police force was the most incompetent in<LEFT><RIGHT> the country, the es-tim<0.06.468><MOUSE EVENT><MOUSE EVENT> So <0.06.281>in about half a year...<MOUSE EVENT><BACKSPACE><RETURN><MOUSE EVENT>ate of half a year would most likel<LEFT5><BACKSPACE><END>y be <0.06.422>far below what it really would take.

10. I decided that it was time for me to do something myself.

11. <RETURN>I sneaked around to<BACKSPACE2>to the <0.07.015>other side of the factory.

12. Exactly as I had thought, the back door was locked, but I saw an open window on the third floor.

13. I tried climbing up to it, but since the wall was made of perfect-ly fa<BACKSPACE>lat plat<BACKSPACE>stic<MOUSE EVENT>a kind of <MOUSE EVENT> which had been <BACKSPACE> <BACKSPACE16><MOUSE EVENT>,<MOUSE EVENT>new <MOUSE EVENT>non-stick <MOUSE EVENT>, I could'nt <BACKSPACE4>n't even get up a centimeter<BACKSPACE2>re.

14. Then, I h<BACKSPACE9>So climbing was out of the c<BACKSPACE>ques-tion.

15. <RETURN>Then, I had another idea.

16. Our factory had a huge number of<0.06.703><MOUSE EVENT>body<MOUSE EVENT> big garbage cans standing around behind the<MOUSE EVENT><BACKSPACE2><MOUSE EVENT>it.

17. I th<BACKSPACE2>manga<BACKSPACE2>aged to put them in a pyramid <BACKSPACE8>pile,<BACKSPACE> which almost, but <MOUSE EVENT>looked <MOUSE EVENT>not enter<BACKSPACE2>irel<LEFT2><RIGHT2>y, <0.05.719>u<BACKSPACE>unlike a pyramid.

18. UI<BACKSPACE2>I managed to climp it up to the open window<MOUSE EVENT>b<MOUSE EVENT>.

19. At last <BACKSPACE> I was inside.

20. <RETURN>I had apl<BACKSPACE2> plan.

21. I had read in a newspaper article about the rival factory that they always had c<BACKSPACE>their coffee break at the exactly <BACKSPACE3> time of 11.00.

22. Now my watch showed 10.18 and i had behind a sock-making machine <LEFT31><BACKSPACE>i<LEFT3><BACKSPACE>I<END> <BACKSPACE>to wait.<RETURN>At exactly elevn<BACKSPACE>en o' clock I heard steps going towards the <0.06.000>lunch room.

23. I <BACKSPACE2>When the steps had faded I ran <0.10.390>quickly to the boo<BACKSPACE>ss's room and we escaped in the boss's personal helicopter which stood parked on the roof.

24. For my help, I got pomot<BACKSPACE4>romoter<BACKSPACE>d not to third, but second sok coi<BACKSPACE>unter's assistant <BACKSPACE>.

25. <MOUSE EVENT>c<MOUSE EVENT> and got a huge bonus.

26. <MOUSE EVENT><MOUSE EVENT><MOUSE EVENT>,<0.11.594><MOUSE EVENT><0.16.297><MOUSE EVENT>

```
27.<RETURN><MOUSE EVENT><RETURN><MOUSE EVENT>
28.<RETURN><MOUSE EVENT><0.07.516>
29.<RETURN><MOUSE EVENT><DELETE><MOUSE EVENT><DELETE><MOUSE
   EVENT><DELETE><MOUSE EVENT>
```

Appendix 5a

Final edited text: Dennis, English text first:

The whole thing started the second year of upper secondary school. My best friend Ben, who's the same age as me, started beeing very strange. At first, we met some new friends at a party, called Allan and Paul. We started to hang around a little bit with our new friends, do-ing different things together. But one day when me met to see a movie at the local cinema, something seemed wrong with both Allan and Paul. They offered me and Ben drugs and I realized that both Allan and Paul were high. I didn't want any of the drugs, but Ben said he wanted to.

The next day, we didn't say a word about the drugs. It seemed like it never happened. Allan and Paul tried to call us a few times, but we didn't answer, and they must have realized we no longer wanted to be friends with them. As time went by, bEN GOT MORE AND MORE STRANGE. hE STARTED BY MISSING A FEW LESSONS IN SCHOOL, AND NOBODY KNEW WERE HE WAS. nOT EVEN ME, HIS BEST FRIEND. aFTER A FEW WEEKS, HE ALMOST NEVER APPEARD IN SCHOOL AND WE DIDN'T SPEND MUCH TIME TOGETHER. wHEN i TRIED TO CONFRONT HIM ABOUT EVERYTHING, HE JUST WOULDN'T LISTEN.

oNE DAY HE CAME TO ME, LATE IN THE EVENING, AND TOLD ME. hE WAS USING DRUGS. i WAS CHOCKED. aPPARENTELY HE STILL HAD CONTACT WITH aLLAN AND pAUL, FROM WHOM HE BOUGHT THE DRUGS. hE TOLD ME HE REALIZED THAT HE NEEDED HELP BUT HE WAS TO AFRAID TO TALK TO HIS PARENTS. i BECAME A BIG HELP FOR HIM THE NEXT FEW WEEKS WHEN i HELPED HIM WITH HIS DRUG-PROB-LEM. wHEN HE HAD BEEN DRUG-FREE FOR A COUPLE OF WEEKS HE WAS STRONG ENOUGH TO TELL HIS PARENTS, AND THEN WE ALL HELPED HIM. nOW HE HAS BEEN DRUG-FREE FOR A WHOLE YEAR AND HE HAS GOOD GRADES. tHIS WHOLE STORY RE-ALLY PUT OUR FRIENDSHIP ON A TEST, BUT IT WORKED OUT FINE AND NOW IT'S MUCH STRONGER.

Appendix 5b
Dennis, linear text, English, showing pauses longer than 5 seconds

1. <START>The whole thing starrted sometime on the <BACKSPACE7>in the fourght grade<BACKSPACE8>t<BACKSPACE4>our hth grade.
2. I liked my frieend<0.05.188><BACKSPACE72>The <BACKSPACE4>UIIIt started <0.08.406>a raint <BACKSPACE2>y <BACKSPACE16>happened a rainy m<BACKSPACE3>y monday.

3. Ben, my beloved nai<BACKSPACE2>eighbour, came 2 my house23
   <mark><0.18.922></mark><BACKSPACE74>It alla startde<BACKSPACE3>ted
   <mark><0.06.141></mark>when i was u <BACKSPACE8>I <BACKSPACE8> somenwhere in
   ythe<BACKSPACE4>yhe<BACKSPACE3>the fourth grade.

4. <BACKSPACE43>ghappern<BACKSPACE2>nen
   <BACKSPACE14>LOL<mark><0.12.266></mark><BACKSPACE3>SSometing<BACKSPACE3>fhinfg<
   BACKSPACE2>g was wrong.

  5. <BACKSPACE2>g<LEFT20>I could feel <RIGHT2><LEFT>s<LEFT>theat
     <RIGHT20>.

6. My <BACKSPACE3>Ben, my neihgbour<BACKSPACE4>ghnour and
   <BACKSPACE9>bour and friensd, had a cols look<BACKSPACE7>ld looks
   o<BACKSPACE3> on his face.

7. <mark><0.13.922></mark>I asked him again<UP><mark><0.07.703></mark><RIGHT83><LEFT> nand it
   was really obvious tahat he was hiding somenthinhg for me.

8. <BACKSPACE6>rom me<RIGHT32>; .<BACKSPACE3>:<RETURN>- Do
   tou<BACKSPACE11>n<BACKSPACE17>"Do you use drugs"?" i <BACKSPACE2>I
   asked him again.

9. <mark><0.06.234> <0.32.484></mark>He denied it , but I couls <BACKSPACE2>d see
   vl<BACKSPACE2>cleasrl y <BACKSPACE24>but i c<BACKSPACE3>U
   <BACKSPACE2>I morst<BACKSPACE2>st <BACKSPACE12> but I knwew he was
   lying <BACKSPACE2>g. "PLzzzzZZZ<BACKSPACE12> "plz omg"
   ai<BACKSPACE2>I said., <BACKSPACE3>.

10. WHAT THE XXXX DO U WANT=!

11. <BACKSPACE2<mark>>?!</mark>
    <mark><0.11.203></mark><BACKSPACE44><UP><LEFT><RIGHT><DOWN><RIGHT><LEFT><RIGHT>
    <LEFT26>again<BACKSPACE5><RIGHT26>

12. <RETURN2>**The whole thing starde<BACKSPACE2>ted**
    <mark><0.06.266></mark>hth<BACKSPACE3>thw <BACKSPACE2>e second yerar of upper
    seceondary school.

13. My <mark><0.06.640></mark>best friend Ben, the same <BACKSPACE9>who was the
    same age as me, star<BACKSPACE4>started beeing very
    stranfe<BACKSPACE2>ge.

14. At first , we met some <mark><0.08.250></mark>new fciriens <BACKSPACE2>ds at a
    party, abd <BACKSPACE3>nf <BACKSPACE2>d
    <mark><0.07.563><0.06.890></mark><LEFT><MOUSE EVENT><BACKSPACE4>
    is<BACKSPACE3>'s <MOUSE EVENT><mark><0.06.625></mark><MOUSE EVENT><LEFT> I
    guess Ben had more in<BACKSPACE2>incommen <BACKSPACE39>.

15. Becn <BACKSPACE3>v ligf<BACKSPACE2>ked them more
    tgen<BACKSPACE3>hen me , and me star<BACKSPACE44> We started to
    hang around a little bit with our new friend s ,<BACKSPACE2>, do-
    ing different stuff together.

16. <0.11.578>But Ben <BACKSPACE8> I
    gel<BACKSPACE3>flel<BACKSPACE3>elt li<BACKSPACE2>that theese per-
    son s were kindof<BACKSPACE2> offd <BACKSPACE5>a ' craza mafakkas.

17. <BACKSPACE12>e<BACKSPACE48>
    <0.16.312>plek<BACKSPACE4>pk<BACKSPACE2>plz<0.08.094><BACKSPACE4>
    <0.05.266><LEFT11><BACKSPACE5>whing<BACKSPACE5>ejhi<BACKSPACE5>
    thinf <BACKSPACE2>gs<RIGHT10> But one day<BACKSPACE9>t I got the
    feeling og <BACKSPACE2>f <BACKSPACE3>that these
    newpwo<BACKSPACE2>eole<BACKSPACE2>ple wasnät <BACKSPACE2>'t
    <BACKSPACE4>'t really <0.07.609><BACKSPACE54>one datrty, after we
    had seen a moveie, <0.05.438>One <BACKSPACE4>one <BACKSPACE5> one
    ogf the <0.06.937><UP><RIGHT65><UP><LEFT2>, called Allan and
    Paul<RIGHT43><DOWN><RIGHT><LEFT4><RIGHT2><BACKSPACE11>Paul and
    <BACKSPACE38>when me met to see a movie at <LEFT31><RIGHT30> the
    local cinema, somethinf <BACKSPACE2>g seem
    <BACKSPACE2>t<BACKSPACE2>emed wriong with both Allan and
    <0.05.609>Paul.

18. <0.05.531>They offered me and Gustav drugs and i <BACKSPACE2>I re-
    alized thet<BACKSPACE2>at they were high<BACKSPACE14>both Allan
    and OPaul er<BACKSPACE2>wee <BACKSPACE3>re<BACKSPACE2>were high.

19. I didn't wan't <BACKSPACE3>t aby<BACKSPACE2>ny <BACKSPACE4>any of
    the drugs, even though the <BACKSPACE18>, but <0.12.078>Ben said
    he wanted to.

20. qI took the <0.42.313><BACKSPACE11>oSo she
    <0.05.953><BACKSPACE7><RETURN2>

21. **The necxt day** , we didnn's s<BACKSPACE3>t say a wrord about
    the drugs.a It was like <BACKSPACE10> seemed likte
    <BACKSPACE3>e it never happeneed<BACKSPACE2>d.

22. We didnt't <BACKSPACE7>stopped calling WAllan and
    Paul<BACKSPACE3>tuis , and so <BACKSPACE4> they stoppe
    n<BACKSPACE2>sdd<BACKSPACE2>d calling ous.

23. <0.05.047>We <UP><MOUSE EVENT><BACKSPACE2>and we no longer were
    friends with them.

24. <mark><0.30.406></mark><MOUSE EVENT><RIGHT><BACKSPACE2> <RIGHT16><LEFT> tryied to call us some<BACKSPACE4>a few times<DOWN><UP><RIGHT><LEFT2><DOWN><RIGHT2> but we didn'r <BACKSPACE2>t wanswer,<RIGHT5> <BACKSPACE2> they must have reaöl-ized we <RIGHT2><BACKSPACE3><RIGHT15><BACKSPACE3>anted to be fr<BACKSPACE2><RIGHT><DOWN><RIGHT18> The time <BACKSPACE2>e <mark><0.10.188></mark>went by, but <BACKSPACE4>and Becn se<mark><0.05.922></mark><BACKSPACE31>As time went by , <mark><0.10.703></mark>g<CAPITAL><SHIFT+BACKSPACE3>, Ben<BACKSPACE2><CAPITAL>Ben got more and morer <BACKSPACE2> stang<BACKSPACE3>range. <mark><0.09.110></mark>HE <BACKSPACE2>e started by missing <mark><0.21.110></mark>li<BACKSPACE2>a fwew lessons in scholl <BACKSPACE3>ol, a<BACKSPACE2> and <mark><0.06.516></mark>nobody knew were he was, not <BACKSPACE5>.<BACKSPACE2>. Not even me , his best friend.

25. <RETURN> He<BACKSPACE2>He <BACKSPACE3>After a few weeks , he al-mots<BACKSPACE2>trst never appeard in school and we almor<BACKSPACE5>didntät<BACKSPACE2>'t spend much time togetther.

26. When i <BACKSPACE2>I tried to confront him about everything, he <BACKSPACE2>e just <mark><0.10.015></mark>wouldntä<BACKSPACE2>ät<BACKSPACE2>'rt listen,.

27. <BACKSPACE2>.

28. On<BACKSPACE2><RETURN2>**One day** <mark><0.09.704></mark><BACKSPACE7>ne day I asked him and me <BACKSPACE3>he <BACKSPACE19>he came to me .

29. <BACKSPACE2>, alate in the evening, and tols <BACKSPACE2>d me.

30. He was using drugs.<MOUSE EVENT><MOUSE EVENT><BACKSPACE3><MOUSE EVENT><MOUSE EVENT>I was chocked.

31. Appaarentlely he still had contact with Allan annd Paul, from wich me baught <BACKSPACE6>ought the gr<BACKSPACE2>drugs.

32. <LEFT21><BACKSPACE3>ho'm<BACKSPACE2>m<RIGHT10><LEFT8>h<RIGHT19> <mark><0.08.047></mark>He <BACKSPACE3>After he tried it that time at the <BACKSPACE12>firtst time, he was totally stuc<BACKSPACE55> I <0.34.407>hu<BACKSPACE2>wwas<BACKSPACE3>a<BACKSPACE4>Though i <BACKSPACE2>I was <mark><0.09.375></mark><BACKSPACE13>Thw <BACKSPACE2>e necx<BACKSPACE2>xt <BACKSPACE10> He tolsd me he realixzes <BACKSPACE2>d the <BACKSPACE2>at he needen <BACKSPACE2>d help and <BACKSPACE4>but he <mark><0.05.078></mark>was to afraid to talk to his parantsts<BACKSPACE4>ents.

33. <mark><0.05.343></mark>I became a big help for him the next few weeks as i<BACKSPACE4>when I helped him with ghis drug-problenm.

```
34.When he had been drug-free for a couple og <BACKSPACE2>f twweeks
   he was storogng enough to tell his parean<BACKSPACE2>nts , and
   then we all helpend him. No we<BACKSPACE3>w he has been drug -free
   for a eh<BACKSPACE2>whole year and hads<BACKSPACE2>ds no
   problem<BACKSPACE14>school is <BACKSPACE10>had goos <BACKSPACE2>d
   grades.
35.<LEFT15><RIGHT><BACKSPACE2>e has<RIGHT13> <0.07.641>This whoole
   <BACKSPACE4>le story has <BACKSPACE5> really <BACKSPACE4>lly but
   <BACKSPACE4>put our friendship on a test, but iit worked out fine
   and now it's myuch stronger.
3 6. <0.25.939><END SCRIPTLOG>
```

Appendix 5c
Dennis: final edited text, Swedish

Plötsligt stod en man mitt i vägen. Jag tryckte så hårt jag kunde på bromspedalen men han var för nära. Det hördes en dov duns när mannen slog i bilen, rullade upp över vindrutan och ner bakom bilen. När bilen stannade låg mannen tio meter bakom mig. Jag satt chockad kvar i bilen innan paniken kom. Jag sprang ut ur bilen och fram till mannen som jag nyss kört på. Han låg på gatan, medvetslös, med blod rinnade från huvudet och med ett av benen brutet, vinklat åt helt fel håll.

Jag sprang så snabbt jag kunde tillbaka till min bil, där jag hade min mobiltelefon. Men hur mycket jag än letade hittade jag den inte. Jag måste ha glömt den hemma. Panikfylld kollade jag ut över den öde landsvägen, utan något spår av andra människor. Jag gick fram till den medvetslösa mannen för att kolla efter telefon, men inte heller han hade någon på sig. Jag förstod att jag var tvungen att själv köra mannen till sjukhuset om han skulle ha någon chans att överleva.

Jag satte mig i förarsätet och körde bilen tillbaka mot mannen, så nära det gick. Sedan lyfte jag så försiktigt jag kunde in mannen i bilens baksäte. Jag körde så snabbt jag kunde mot det närmaste sjukhuset, två mil iväg. Mannen gav ifrån sig små tysta stönanden, vilket var ett bra tecken, för då visste jag i alla fall att han levde. Efter en stund kom

jag in i staden och hittade sjukhuset. Jag sprang in och hämtade läkare som kom ut med en bår att lägga mannen på. Jag följde med in och hjälpte till att ringa mannens familj, medan läkarna kollade mannens tillstånd. Familjen, bestående av fru och två barn, kom snabbt till sjukhuset och jag förklarade vad som hade hänt. Det visade sig att mannen behövde opereras för att överleva. Operationen gick väldigt bra och mannen fick inga bestående skador. Familjen var oerhört glada för att jag hade hjälpt mannen och krocken ansågs vara mannens fel, och jag fick lite pengar för skadorna på bilen. Allt jag behövde betala var parkeringsbötern för felparkeringen utanför sjukhuset.

Appendix 5d

Dennis, linear text, Swedish, showing pauses 5 seconds and longer

1. `<START>Jag heter Kalle<BACKSPACE15>Morgonsole <BACKSPACE3>len låg tät över de små <BACKSPACE4>xxxx sssss<BACKSPACE39>VISA PO<BACKSPACE23>xxxx xxxxxxx!<0.08.828><BACKSPACE15>lozl <BACKSPACE3>z<BACKSPACE>lz 0mg fxxxc3fr<BACKSPACE2>r <BACKSPACE5>klk<BACKSPACE2>k3r PlZz <BACKSPACE5>p1Z<BACKSPACE>zZ st0e<BACKSPACE>p<BACKSPACE>P<BACKSPACE4>St0p sp3<BACKSPACE>4a<BACKSPACE>mm1nf<BACKSPACE>g m3<0.21.391><BACKSPACE68>Massa text massa tezt<BACKSPACE24><PASTE><PASTE>hej <LEFT4><COPY><BACKSPACE><PASTE>v<PASTE><BACKSPACE11><PASTE><PASTE> <PASTE><PASTE><PASTE><PASTE><0.07.047><BACKSPACE36>Mina föräldrar skulle skijs<BACKSPACE30>Plötsligt låg at<BACKSPACE2>tanten <0.10.140><BACKSPACE7>han där på gatan, men ingen <BACKSPACE42>`

2. **`Plötli<BACKSPACE2>sligt stod en man mitt i vägen.`**

3. `<0.17.218>Jag tryckte så hårt jag kunge<BACKSPACE2>de på gasp<BACKSPACE4>bl<BACKSPACE>romspef<BACKSPACE>dalen men han var för nära.`

4. Det hördes en dov duns och mannen slägdes <BACKSPACE5>nge<BACKSPA-
   CE>des bakom<BACKSPACE25>när mannen slog <BACKSPACE2>d
   <BACKSPACE2>g i bilen <BACKSPACE>s <BACKSPACE> framdel och rulla-
   de<BACKSPACE7>rullade öve3r <BACKSPACE3>r bie<BACKSPACE30> och
   tu<BACKSPACE2>ryu<BACKSPACE2>ullade<BACKSPACE7>rullade upp över
   vid<BACKSPACE>ndrutan och ner bakom bie<BACKSPACE>len.

5. <LEFT50><RIGHT2><BACKSPACE5>.<BACKSPACE>, <RIGHT47> En prins
   v<BACKSPACE>kom fram och xxxxxx min mamma.

6. <BACKSPACE40> <0.08.421>Tio mey<BACKSPACE7>När bilen öntligen
   <BACKSPACE10> stannade låg mannen tio meter bakom mig <BACKSPACE>.

7. Jag satt chockade <BACKSPACE3>e<BACKSPACE>d
   shockad<BACKSPACE3>kl<BACKSPACE7> kvar i bilen innan verkligheter
   <BACKSPACE2>n <BACKSPACE13>paniken kom.

8. Jag <BACKSPACE5> <0.07.578>Jag hade inga skador <BACKSPACE19>g,
   som var <BACKSPACE10> va<BACKSPACE3> vakn<BACKSPACE4>sprang ut ur
   bilen och r<BACKSPACE>fram till den <BACKSPACE4>mannen som jag
   nyss kört på.

9. Han låg<0.05.188><BACKSPACE2>åg på gatan,
   medvelt<BACKSPACE2>tslös,<BACKSPACE> med <BACKSPACE6>s, mef
   <BACKSPACE2>d blod rinnade från huvudet och men ena <BACKSPACE3>tt
   av v<BACKSPACE>benen viklat helt åt fel <BACKSPACE19>brutet
   <0.07.203>och<BACKSPACE3><LEFT21><BACKSPACE>d<LEFT3><BACKSPACE5>
   <BACKSPACE>, <RIGHT24><LEFT25><RIGHT16><LEFT16><BACKSPACE>
   och<RIGHT25><BACKSPACE> <BACKSPACE>, i<BACKSPACE>vinklar
   <BACKSPACE2>t åt helt fel håll.

10.<0.18.844><RETURN2>Jag <0.05.922><BACKSPACE4>Så <BACKSPACE3>Jag
   spa<BACKSPACE>rang så snabbt jag kunde ti<BACKSPACE>illbaka till
   min bv<BACKSPACE>il för<BACKSPACE3>d'r<BACKSPACE2>är min
   movi<BACKSPACE2>biltelefon fanns.

11.<mark>0.18.922</mark>Mern<BACKSPACE2>en<BACKSPACE2>n <BACKSPACE5>

<BACKSPACE3>s<BACKSPACE29>l<BACKSPACE>il, där jag visste att min

mobil<BACKSPACE20>hade min mobiltelefon.

12.<mark><0.09.172></mark>Men inte fanns den <BACKSPACE20> MEn <BACKSPACE3>en där

fanns inf<BACKSPACE14> hur mycket jag än lete<BACKSPACE>ade hitta-

de jag den inte.

13.Jag<BACKSPACE5>. Jag måsted <BACKSPACE2>e <BACKSPACE2> väl ha

glömt den hemma.

14.<mark><0.12.047></mark>Ja<mark><0.05.875></mark><BACKSPACE2>H<mark><0.05.28</mark>1><BACKSPACE>Panik

blandart <BACKSPACE2>t<BACKSPACE2>t med ångest fick mig att olla

Pxxxxxx Oxxxxx.

15.<BACKSPACE59> <LEFT22><RIGHT><BACKSPACE4><RIGHT20> Paniks<BACKSPA-

CE>fylld ko<BACKSPACE2>såg <BACKSPACE4>kollade jag ut över den

öf<BACKSPACE>da lan<BACKSPACE4>e<BACKSPACE2>e landsvägen, utan nå-

got spår av andra<BACKSPACE3>r<BACKSPACE>n<BACKSPACE>dra männis-

kot<BACKSPACE>r-<BACKSPACE>.

16.<mark><0.06.047></mark>Jag va<BACKSPACE3> blav <BACKSPACE3>ebv <BACKSPACE3>b

<BACKSPACE2>v tb<BACKSPACE>vungen att

<mark><0.20.203></mark><BACKSPACE21>M<BACKSPACE>Jag gick fg<BACKSPACE2>fram

till mannen <BACKSPACE7>den medvetslösa menn<BACKSPACE3>annen för

att kolla efter telefon <BACKSPACE>, men inte heller han hade nå-

gon.

17.<BACKSPACE2>p<BACKSPACE> på sig.

18.<mark><0.05.219></mark>Jag fårtod<BACKSPACE5>ös<BACKSPACE>rstod att jag var

tvungen att <mark><0.05.219></mark>lyfta in <BACKSPACE9>köra mannen till sjuk-

huset <BACKSPACE20><LEFT13><DOWN><RIGHT5> själv<RIGHT8>nnen

tul<BACKSPACE2>ill sjukhuset <BACKSPACE>, om

<BACKSPACE5><RIGHT11><LEFT>om han skulle ha någon chans att över-

leva.

19.<RETURN2><1.06.953><BACKSPACE2><RETURN2>Jag körde

t<BACKSPACE7>h<BACKSPACE>satte mig io <BACKSPACE2> förar <BACKSPA-

CE>sätet och <0.09.344><BACKSPACE4>och backade

bild<BACKSPACE12>körde bilen tillbaka <BACKSPACE>, <BACKSPACE2>

mot mannen, så nära det fi<BACKSPACE2>gick, och <BACKSPACE4>innan

jag <BACKSPACE12>.

20.Sedan lyfte jag så försiktigt jag kunde upp mannen <BACKSPACE10>pp

mannen och <BACKSPACE15>in mannen i bilen.

21.<BACKSPACE2>s baksäte. Där <BACKSPACE6>, där han fic <BACKSPACE>k

lifg<BACKSPACE2>gga<BACKSPACE20>. <1.07.672>q<BACKSPACE>spam ;)

<BACKSPACE> :wink_ <BACKSPACE2>: <BACKSPACE16> <0.23.032>F<BACK-

SPACE>FÖR <BACKSPACE4>FÖR <BACKSPACE4> <RETURN5>CLAES <BACKSPACE>

HEJ VISA PARR<BACKSPACE2>TTa<BACKSPACE>ARNA ?

<BACKSPACE24>HILL ;) :WING: <BACKSPACE3>F<BACKSPACE>K:

<BACKSPACE16>8)<BACKSPACE9> <BACKSPACE> <BACKSPACE> <BACKSPACE>

<BACKSPACE> <BACKSPACE> <BACKSPACE> <BACKSPACE> <BACKSPACE2>

<BACKSPACE> <BACKSPACE2>.

22.<BACKSPACE> <BACKSPACE2> <BACKSPACE2> <BACKSPACE2> <BACKSPACE>

<BACKSPACE> <BACKSPACE2> <BACKSPACE> <BACKSPACE>

<BACKSPACE>hej he he heh<BACKSPACE>ej eh<BACKSPACE2>hej hej

e<BACKSPACE24>hej hej hej hej h<BACKSPACE>e<BACKSPACE>hej e<BACK-

SPACE>hej hej<BACKSPACE34> Jag <BACKSPACE5> Ja <BACKSPACE>g körde

så snabbt jag kunde mot <0.06.187>od<BACKSPACE3> det närma<BACK-

SPACE>sta sjukhuset

LEFT14>a<RIGHT3><BACKSPACE>e<RIGHT9><DOWN><RIGHT><DOWN11><UP11><DO

WN22><UP11><DOWN2><UP><DOWN11><UP10><DOWN11> OMG C4 ?

<BACKSPACE10>t <0.06.563><BACKSPACE>. <BACKSPACE2>

<BACKSPACE>.<BACKSPACE> <BACKSPACE>.

23.Mannen låg och sov ;)<BACKSPACE22> Mannen a<BACKSPACE>gav ifrån
   sig små tysta stä<BACKSPACE>önande n<BACKSPACE2>n <BACKSPACE>,
   vilket bar <BACKSPACE4>ca<BACKSPACE2>var ett bra tecken,
   f<BACKSPACE3>, för då visste jag i alla fall at <BACKSPACE>t han
   levde.

24.Han <BACKSPACE>s rum var lol.

25.<BACKSPACE14> min var fga<BACKSPACE3>ganska lol.

26.<BACKSPACE26> <UP><RIGHT22><DOWN><BACKSPACE3> Efyer<BACKSPACE3>ter
   <MOUSE EVENT>, 2 <BACKSPACE2>två mil iväg<DOWN><RIGHT11>en stund
   närmat<BACKSPACE>de <BACKSPACE8>kom jag in i staden och hittade
   sjukhuset <BACKSPACE>.

27.<0.06.188>Jag sprangf <BACKSPACE2> in och hämtade
   hjäp<BACKSPACE>lp<BACKSPACE5>läkare som <BACKSPACE4>som kom ut med
   b<BACKSPACE>en bår att lägga mannen på.

28.<0.12.109>Vi <BACKSPACE3>När<BACKSPACE3>Jag fäl<BACKSPACE2>ölde
   <BACKSPACE3>jde med in och hjälpte de <BACKSPACE4> till att hitta
   <BACKSPACE6>ringam <BACKSPACE2> me<BACKSPACE>annens familj
   <BACKSPACE>, medan läkarna kollade hur df<BACKSPACE>et var
   <BACKSPACE12>om mannen behöve<BACKSPACE>de
   op<0.06.391><BACKSPACE20>mannens tillstånf<BACKSPACE>d.

29.Familgen<BACKSPACE3>fe<BACKSPACE2>jen <BACKSPACE>,
   bbeståd<BACKSPACE6>estående av fru och två barn, kom snabbt till
   sjukhuset <BACKSPACE>.

30.Det vi<BACKSPACE8> och jag föl<BACKSPACE>rklarade vad som hade
   hänt.

31.Det visade sig att mannen behövde opereras för att kunnda
   <BACKSPACE3>a <BACKSPACE6>överleva men det gc<BACKSPACE10>och
   <BACKSPACE5>.

32.Operationen gick väldigt bra och mannen

ha<BACKSPACE2>vakna<BACKSPACE5>g<BACKSPACE>fick inga

beståd<BACKSPACE>ende skador.

33.Familge<BACKSPACE2>he<BACKSPACE2>ge<BACKSPACE7>D<BACKSPACE>Det var

ni<BACKSPACE2>ingens fel att <BACKSPACE23>Krocken ansågs inte vara

någons gf<BACKSPACE2>fel, snarade <BACKSPACE3>re mannen <BACKSPA-

CE>s än mitt, och jagf <BACKSPACE2> kom undan hela situi<BACKSPA-

CE>ationen men<BACKSPACE>d <BACKSPACE76>mannens <BACKSPACE8>någons

fel, jag såf<BACKSPACE>gs som <BACKSPACE51> Familjen var oerhört

glassa<BACKSPACE3>da för att jag ghaad<BACKSPACE5>hade hjälpt man-

nen.

34.<BACKSPACE7>mannen, och det

<BACKSPACE4>det<0.12.468><BACKSPACE3>det visade <BACKSPACE16> det

ansåfg<BACKSPACE2>gty<BACKSPACE>s<BACKSPACE2>s inte vara

någr<BACKSPACE>p<BACKSPACE>ons

gel<BACKSPACE3>fel<BACKSPACE><LEFT28><RIGHT><BACKSPACE3>pcj<BACKSP

ACE4>och <BACKSPACE5> och krocken<RIGHT27>l.

35.<0.05.250>Jag kom undan<BACKSPACE13>Jag <0.08.984><LEFT> gick

t<BACKSPACE>ut igen till min bil <BACKSPACE30>Allt jag fik

<BACKSPACE2>ck

betala<BACKSPACE21><LEFT10><RIGHT5><BACKSPACE6>,a<BACKSPACE12>bara

<BACKSPACE4>vara mannens<RIGHT5><BACKSPACE>, och jag fick lite

pengar för skadorna på bilen.

36.Allt jag behövde betala var fel<BACKSPACE3>parkeringsbötern för

felpra<BACKSPACE2>arketin<BACKSPACE3>ringen utanför sjukhuset.

37.THE END!<BACKSPACE9> Snipp snapp <0.11.031>snut<BACKSPACE4>snut,

så tog sagan slut.

38.<BACKSPACE> <BACKSPACE2>! <SHIFT+BACKSPACE2>y<SHIFT+BACKSPACE>t!

<BACKSPACE35>

ENKÄT   **Din kod är:**

1) Hur tycker du att det var att delta i undersökningen?

1_____10

Väldigt roligt   Väldigt tråkigt

2) Vilket av följande tog längst tid?

a) att tänka ut <u>vad</u> du skulle skriva   b) att tänka ut <u>hur</u> du skulle skriva det?

3) Om du svarade (b) på fråga 2, vilket var svårast?

a) att hitta rätt ord   b) att kunna skriva grammatiskt korrekt

c) att kunna stava rätt   d) annat:_____

4) Hur tycker du att det var att skriva den <u>engelska</u> texten jämfört med den svenska texten?

1_____10

Väldigt lätt   Väldigt svårt

5) Kan du säga vad som var svår

7) Vad gjorde du om du inte visste hur du skulle skriva någonting på engelska?

a) använde dig av andra ord

b) formulerade om hela meningen

b) lät bli att skriva det du ville

8) Tycker du att det är lätt eller svårt med engelska?

1_____10

Väldigt lätt   Väldigt svårt

9) Använder du engelska på din fritid?

1_____10

Ja, mycket   Nästan inte alls

10) I vilka sammanhang använder du engelska? (Du kan kryssa för flera alternativ)

( ) dator   ( ) TV, film   ( ) tidningar

( ) böcker   ( ) annat:_____

Om du kryssade i ( ) framför böcker, hur ofta läser du på engelska?

1_____10

Väldigt ofta   Väldigt sällan

11) Skriver du någonsin på engelska på din fritid?

( ) ja   ( ) nej

Om du svarade ja, vad skriver du?

( ) brev   ( ) dikter

( ) dagbok   ( ) annat:_____

Tack för din medverkan!