The Significance of Relevant Utterances in Call Centre Dialogues: A Psycholinguistic Study of Merging of Mental Spaces

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Abstract
The present psycholinguistic study explores the phenomenon of mental spaces and the processes which contribute to a mental space blend in the call centre communicative context between the call centre operator and the customer. Mental space blends are measured quantitatively by means of Correct Information Unit (CIU) and Mean Length of Utterance (MLU). The correlation between CIUs and MLU in a blended space is investigated. The results of the study indicate that a superior number of CIUs in a blended space mapped into a successful outcome of the communication between the call centre operator and the customer. However, data analysis indicates that a superior number of CIUs did not necessarily entail an inferior number of MLUs. Data analysis suggests that an inferior number of MLUs in the conversation does not contribute to achieving a blended mental space. The results of the study indicate no correlation between MLUs and achieving a blended mental space in a call centre conversation.

Keywords
Mental spaces, blending, relevance, CIU, MLU, call centre discourse.
1. Introduction

In the working environment of a call centre, call centre operators are encouraged by their employers to follow certain discourse strategies when receiving incoming calls from customers (Hood, 2010). These discourse strategies on the part of the call centre operator (further referred in this essay as ‘operator’) involve a certain level of control over the linguistic behavior (Cameron, 2000). The operator’s discourse strategy is characterized by efficiency and understanding during the conversation with customers (Cameron, 2000). It is argued that the operator’s communicative goal involves a fast paced, smoothly running conversation in order for the call to be both cost-efficient and for the purpose of the dialogue (i.e. a solution to the customer’s problem) to be achieved with as little complication as possible for the two speakers (Cameron, 2000). In this essay, the operator’s discourse strategies will be explored through the prism of a psycholinguistic investigation. Central to this investigation is the notion of mental space and blended mental spaces.

The mental space theory defined by Fauconnier & Turner (1994) suggests that a mental space is created for all input a person receives, and that each mental space represents one specific aspect of the whole concept. In order to understand information fully, all the representations from the distinct mental spaces need to be combined (Fauconnier & Turner, 1994). It is argued in this essay that the notion of mental spaces has a meaningful role in call centre discourse. Presumably, when the conversation at the call centre commences, the customer and the call centre operator do not share an identical mental space. Namely, the customer’s mental space contains the question or the problem regarding a certain item, whereas the operator’s mental space contains the answer or the solution to the customer’s problem regarding the same item. Presumably, if the conversation between the operator and the customer is successful, then these two different mental spaces project into a blended space, thus resulting in a communicatively successful conversation (Fauconnier & Turner, 1994). A blended mental space in conversation is facilitated by mutual pre-existing frames and schemas shared by both the interlocutors (Fauconnier & Turner, 1994). Thus, it is suggested that the cognitive process of achieving a solution in the call centre conversation involves the construction of a blended mental space between the two speakers.

1.1 Aims of the present study

The focus of this essay is on the blended mental spaces involved in the call centre communication between the call centre operator and the call centre customer. Arguably, it is challenging to measure mental space blending objectively, since there is no robust objective methodology for measuring mental spaces (Fauconnier & Turner, 1994). In this essay, blended mental spaces will be measured objectively by applying two distinct quantitative methods. First, the objective measure will involve Correct Information Units (CIUs). CIU-utterances have been defined as utterances that are relevant to the topic and intelligible in the context of the conversation (Nicholas & Brookshire, 1993). In this essay, CIUs will be applied within the framework of Grice’s (1975) Relevance Theory (Wilson & Sperber, 1986). Second, blended mental spaces will be measured by applying the notion of Mean Length Utterance (MLU). The MLU of a conversation is a measure which has been consistently employed in psycholinguistic research. It involves dividing the number of morphemes with the number of utterances (Klee & Dietz Fitzgerald, 1984). Hence, the purpose of this study is to measure the discourse through the means of CIU and MLU to explore what features that might contribute to a blended mental space between the customer and the call centre operator.
1.2 Hypothesis

Based upon previous research findings (Fauconnier & Turner, 1994; Wilson & Sperber, 1986; White, 2010), it was hypothesised that the application of CIUs in a conversation will contribute to the achievement of a blended mental space. Furthermore, the hypothesis suggests that a lower result of the MLU contributes to that a blended mental space in a conversation can be achieved sooner than a higher result of the MLU would.

Following the hypothesis, specific research questions were formulated as follows:

- What is the correlation between CIUs and blending of mental spaces in call centre discourse?
- Can an inferior number of MLUs contribute to achieving a blended mental space sooner than a superior number of MLUs?
- Does there appear to be a correlation between CIUs and MLUs in a blended space in a call centre conversations?

2. Theoretical Background

2.1 Mental Spaces

In psycholinguistics, cognitive functions of language involve the notion of mental processes (Dufva et al., 1998). It is argued that mental phenomena of language use cannot be limited to processes within the brain, but are also affected by the social and physical environment (Dufva et al., 1998). Arguably, the notion of space is a multidisciplinary phenomenon and the relation between physical and mental space is expressed in human communication (Paradis et al. 2013). Moreover, Paradis et al. (2013) suggest that physical communication, such as speaking, writing and gesturing, should be considered a “window” into the person’s mental image of what is being communicated. Presumably, the mental events of language involve the whole “system” of the brain, body and environment (Dufva et al., 1998). This entails that memory and representations of information are consistently changing due to the dynamics of the context in which the information is perceived (Edelman, 1992). Arguably, both long-term and short-term memory are affected by the environment. Hence, representations stored in long-term and short-term memory respectively will not be accessed in identical manner, and new representations in long-term and short-term memory are created depending on context and environment (Edelman, 1992). This suggests that cognitive processes should not be considered permanently stored in the brain. Rather, language knowledge should be seen as situational and highly context-sensitive (Dufva et al., 1998).

Fauconnier & Turner (1994) introduced the phenomenon of mental spaces. In order achieve a full understanding in a discourse situation, it is necessary for the different input spaces to project into a blended space. Arguably, every interlocutor constructs a mental space for all the input information s/he possesses (Fauconnier & Turner, 1994). However, each mental space only represents one specific aspect of the input (Fauconnier & Turner, 1994). Fauconnier & Turner (1994) argue that each of the input spaces represents partial structure from one point of view, rather than entire domains and Coulson & Oakly (2000) have added to this by suggesting that the blending of mental spaces is a method of exploring human information integration.

The blended space is regarded as a middle space, which combines information and concepts from the different mental spaces, thus resulting in a complete information structure (Fauconnier & Turner, 1994: 5). Furthermore, each speaker possesses a generic space, which typically contains such structures as frames and schemas common to the different input spaces (Fauconnier & Turner, 1994). The notion of frames involves different kinds of speech activities. Different frames can be used within the same discourse community depending on what your “goal” of the conversation is, i.e. the frame applied by a speaker depends on the function of the discourse (Tannen & Wallat, 1987). The term schema has been defined as the background information of a topic and a specific person’s knowledge.
about the world (Tannen & Wallat, 1987). Sharing structure from the generic space could thus for example entail that speakers in interaction can leave certain items unsaid since it is already a part of both speakers knowledge of the world (Fauconnier & Turner, 1994). The notion of the generic space is further explained in section 2.3.

2.2 Discourse of a Call centre

Czerniawska (1998) argues that awareness of one’s own language use in business and service situations should be regarded as an important discourse variable. Therefore, it is advantageous to manage the language used in such conversations, rather than just “leave it to take care of itself” (Czerniawska, 1998). It has been argued that speaking styles associated with call centre discourse are similar worldwide (Hultgren, 2011). Similarities in manner of speaking at a call centre stem from the explicit training in linguistic strategies the call centre operators receive. The call centre discourse strategies are usually similar worldwide, since there is a motivation to achieve a globalized speech style in call centre discourse (Hultgren, 2011). However, it remains to be explored what specific psycholinguistic components a globalized call centre discourse involves. Specifically, does it involve mental space blending in a conversation between the call centre operator and the call centre customer?

In previous studies, certain strategies have been reported to be used in call centre dialogues (Cameron, 2000; Lockwood, 2010). These strategies are employed to prevent unsuccessful service outcomes and unsatisfied customers (Hui, 2010). Presumably, when the communication between the two speakers proceeds smoothly and efficiently, an understanding between the two parts can be achieved, especially when the operator shows empathy towards the customer (Cameron, 2000; Hui, 2010).

Efficiency is a prioritised feature in call centre dialogues as the operator generally has a set goal of how long an average call should be (Hultgren & Cameron, 2010). Supposedly, specific linguistic strategies, or common routines, often exist as an aid in order to reach this goal (Hood, 2010). For instance, the operators are encouraged to repeat back some of the customer’s more important answers to the operator’s questions (Cameron, 2000: 330). Initially, this strategy has been perceived as unnecessary and time consuming, since it increases the utterances made by the operator and prolongs the call. However, when taking the consequences of not applying these strategies into consideration, one realises that these strategies save the speakers’ time. For example, repetition can help prevent misunderstandings, which might have entailed an unsuccessful completion of the call or a time consuming attempt to settle the misunderstanding (Cameron, 2000). Additional linguistic strategies which operators are commonly encouraged to use involve minimal responses, questions to ensure that the correct information is retrieved, and pauses between utterances (Cameron 2000). However, these strategies are used in order to avoid miscommunication that can cause a longer and “unnecessary” part of the dialogue. Other strategies employ short phrases instead of longer utterances to retrieve certain information from the customer (Cameron, 2000). The impact of these strategies when trying to achieve a blended mental space in a call centre conversation will be further discussed in the following sections.

2.3 Mental space blending in call centre discourse

The previous section demonstrated a few characteristics often applied in call centre discourse. They are used in order to create an understanding and a successful outcome of the call centre dialogue (Cameron, 2000; Hui, 2010). Arguably, these strategies could thus contribute to the achievement of a blended mental space in the conversations. Paradis et al. (2013) suggest that all communication, such as speaking, writing and gesturing should be seen as reflections of a person’s mental space. It is argued that there is a significant connection between mental spaces and language, and that how a person perceives information is based upon both previous knowledge and new input. Therefore, a person’s mental space is constantly updated and changed (Paradis et al., 2013). Referring to
Fauconnier & Turner’s (1994) definition of blended spaces, the customer’s problem cannot be solved without a construction of the blended mental space in a conversation between the customer and the operator. Presumably, prior to the phone call to the call centre, a customer does not have a full understanding of his/her problem. In other words, the customer knows what his/her question is, but does not know the answer to it, which entails that s/he does not yet have a full understanding of the item’s nature until it becomes blended with the operator’s space. Similarly, the operator cannot reach his/her communicative goal until the operator’s and the customer’s mental spaces become blended. This suggests that one mental space needs to be mapped into the context of another mental space (Fauconnier & Turner, 1994). Without the input from the customer’s mental space, the operator cannot generate a solution to the customer’s problem. Not until the two mental spaces reach the blended space can inferences be made about the customer’s question and the operator’s answer and the communicative goal can be reached (Fauconnier & Turner, 1994).

As Fauconnier & Turner (1994) suggest, mental spaces are influenced by an additional space, i.e. structure from the generic space. As previously mentioned in section 2.1, sharing structure from the generic space entails that speakers in interaction can leave certain items unsaid since they share common knowledge about the world. For instance, in call centre related conversations the customer does not have to introduce him/herself as a customer calling to receive help from the operator since both speakers know this through the already existing information in their generic mental space. Furthermore, the structure from the generic space contributes to that the customer and the operator are aware of the norms and expectations of the discourse frame applicable to a particular conversation (Tannen & Wallat, 1987; Fauconnier & Turner, 1994). Thus, the generic space exists as an aid when trying to achieve a blended mental space in conversation (Fauconnier & Turner, 1994).

3. Methodology

3.1 Material

The source material of this study involves recorded conversations from a Swedish mobile operator’s call centre. All of the conversations are interactions in English between one customer and one operator where the customer has initiated the telephone call to the company in order to retrieve an answer/solution from the operator to one or several question(s)/problem(s). The examples presented in this study were selected according to their relevance for the present study in order to demonstrate an analysis and the results in an as clear manner as possible.

3.2 Participants

The group of participants consists of 15 customers and nine call centre operators. All the participants are aware of being recorded in the interactions and ethical clearance for the material of this study has been received by the call centre management. All the participants’ information remains confidential.

3.3 Definition of terminology

3.3.1 Correct Information Unit, the Cooperative Principle and the Relevance Theory

In this essay, the term Correct Information Unit (hereafter CIU) is applied to the analysis of the call centre data. Nicholas & Brookshire (1993) define CIUs as follows:
Correct information units are words that are intelligible in context, accurate in relation to the picture(s) or topic, and relevant to and informative about the content of the picture(s) or the topic. Words do not have to be used in a grammatically correct manner to be included in the correct information count.

The notion of CIU in this essay has been modified in accordance with Grice’s Relevance Theory (1975). Relevance Theory is a cognitive psychological theory which suggests that the more positive cognitive effects an input has after being processed, the more relevant should it be considered (White, 2011). A cognitive effect occurs when an input of new information interacts with a context of existing assumptions (White, 2011). A positive cognitive effect could occur if, for instance, spoken information is understood by the speaker’s interlocutor and the interlocutor draw the speaker’s desired conclusions from the input (White, 2011). The evidence for that an utterance should be considered relevant is drawn from the conversation between the interlocutors. According to Relevance Theory, the input is also considered more relevant if it is being processed as efficiently and with as little effort as possible (White, 2011). Furthermore, it is argued that the relevance of the input can be measured through the effect it has on certain outcomes in a specific context, and that the more important conclusions it is possible to draw from the input the more relevant should it be considered (Wilson & Sperber, 1986).

3.4 Method

In this study, the analysis of a blended mental space was conducted by means of measuring Correct Information Units (CIUs) and Mean Length Utterance (MLU). It was investigated whether or not the number of CIUs impacts a blended mental space for the customer and operator in the call centre dialogues. Furthermore, it is explored whether efficiency strategies applied in the interactions, according to psycholinguistic standards, should be considered relevant in these kinds of conversations. Measuring the MLU of the conversations was executed by counting all the utterances and morphemes in relevant excerpts of conversation starting when the customer presents his/her problem/question. The count of utterances and morphemes ends when the two speakers appeared to have reached a solution, which has been assumed to be the aim of the conversation. An utterance was defined as one turn in the dialogues, i.e. one speaker’s utterance was assumed to be finished as soon as the other speaker took his/her turn in speaking. Voiced pauses, such as “uh, eh, ehm” etc., were not counted when measuring the MLU of a conversation. Excerpts of the conversations containing the utterances of salutations etc. were considered irrelevant for this study. Instances when the customer presented an additional problem to the operator, after the initial problem had been solved, have not been analysed. These parts of the conversations might certainly be relevant for a different study, however, this study has limited itself to analysing the parts of the conversation where one distinct input space is presented by each speaker and where those two spaces eventually reach a blend. The CIUs in the excerpts were measured according to Relevance Theory and utterances which did not apply to Relevance Theory were regarded redundant. In order to find out whether an utterance or part of an utterance should be considered redundant it was investigated whether the conversation in question appeared to have an equally, or more, successful outcome without these utterances. Thus, it was argued that after removing the redundant utterances (non-CIUs) the same information would still be communicated between the speakers in the conversation.
4. Results and Discussion

4.1 Tables

Data analysis has yielded the following results, summarised in the tables below:

Table 1. Morpheme comparison, including/excluding redundant morphemes

<table>
<thead>
<tr>
<th></th>
<th>Morphemes with the redundant (non-CIU) morphemes</th>
<th>Morphemes without the redundant (non-CIU) morphemes</th>
<th>Redundant (non-CIU) morphemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example 2</td>
<td>252</td>
<td>184</td>
<td>68</td>
</tr>
<tr>
<td>Example 1</td>
<td>286</td>
<td>258</td>
<td>28</td>
</tr>
</tbody>
</table>

Table 2. MLU results, including/excluding redundant morphemes

<table>
<thead>
<tr>
<th></th>
<th>MLU with the redundant (non-CIU) morphemes</th>
<th>MLU without the redundant (non-CIU) morphemes</th>
<th>Deviation MLU score</th>
<th>Deviation MLU percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example 2</td>
<td>22.9</td>
<td>16.7</td>
<td>6.2</td>
<td>27 (decrease without the non-CIU)</td>
</tr>
<tr>
<td>Example 1</td>
<td>9.22</td>
<td>9.55</td>
<td>0.33</td>
<td>3.5 (increase without the non-CIU)</td>
</tr>
</tbody>
</table>

4.2 Mental spaces and CIU analysis

As previously argued in sections 1 and 3.2, the notion of mental spaces is applicable in call centre dialogues. It is suggested that the customer and the operator respectively have one distinct mental space and that in order for their spaces to be blended, the customer’s problem needs to be solved. In order to answer the first research question stated in sections 1.2, an analysis of the excerpts from Example 1 and 2 is conducted, to demonstrate how CIUs can affect the goal of mental space blends. In Table 1 the results are demonstrated and a discussion of these will follow below.

Example 1

2 C: (...) eh m I have a question for you
3 O: yes of course
4 C: how do I become the administrator for my account?
In the dialogue in Example 1 the customer (C) presents his/her input space through his/her question in utterance 4. Here, the customer assumes that the operator (O) has an idea about what to “become an administrator for his/her account” implies, which utterances 5 and 6 confirm that the operator in fact does. In utterances 7 and 9 the operator continues by assuming, for example, that the customer has background knowledge about the “homepage” etc., which the customer, through his/her answers in utterances 8 and 10, confirms that s/he does. This suggests that the two speakers share the structure of a generic space (Fauconnier & Turner, 1994), which enables them to make such utterances without
first explaining the background to the information that was uttered. That is, fewer utterances are necessary, which entails that the goal of the conversation is reached sooner. Furthermore, utterances in the lines 2-10 are considered CIUs, since until this point of the conversation, the utterances appear to be intelligible to both of the speakers. These claims are based on Relevance Theory, mentioned in section 1 and 3.2. The utterances made up until line 10 in this dialogue could be considered relevant because; 1) they are indeed relevant in the context of call centre discourse, and 2) they have a positive outcome, that is, the speakers understands each other and the actions made in the conversation are successful. Arguably, the structure from the generic space, which the two speakers share, can be considered evidence for that the customer’s and the operator’s mental processes are affected by the environment and the context in interaction, as well as the assumed cognitive abilities of the speakers. Presumably, without the background knowledge of how to use a computer and access a webpage, the operator’s instructions would probably have been processed in a different manner by the customer, and not be perceived as relevant utterances. Thus, these arguments support the claim that utterances cannot be perceived as relevant unless they are uttered in the right context and has a positive cognitive outcome, that is, certain utterances in conversation will only be perceived relevant by the speakers if they share the structure of a generic space, which as previously mentioned, can help construct a blended mental space in the conversation (Fauconnier & Turner, 1994).

In utterance 11 and 13, the operator incorrectly assumes that they share the structure of the generic space, although, after observing the customer’s utterances in the lines 12 and 14, they appear not to, at this point of the conversation. The evidence of a lost common structure in the generic space could also imply that utterance 11 and 13 should not be considered CIU, since they are not informative for the customer to understand how s/he is going to perform the action s/he is asked to do. The utterances 11 and 13 are not relevant utterances according to the Relevance Theory, since the customer’s and the operator’s verbal exchange in line 11-14 does not help in achieving a blended mental space for the two speakers and the outcome of these utterances are therefore not the desired one. Would the operator not have made the assumptions about the shared generic structure, the utterances in the lines 11-14 might not have been necessary. Subsequently, the excerpt of this conversation indicates that the lack of CIUs is a cause for delay in reaching a blended mental space. Through the use of utterances mutually intelligible to the speakers, the conversation could possibly have been shortened by four utterances and a blended mental space could have been reached sooner than, as suggested, in utterance 36. The achievement of a blended mental space entails that a few of the customer’s mental representations have changed. For instance, the customer remembers how to access the webpage in question, and had certain mental representations regarding it. However, it is argued that after receiving new input regarding some of the functions of the webpage, new representations are created and stored in the customer’s long-term memory and the concept of it thus partially changed, i.e. the different mental spaces merged into a blend.

**Example 2**

4 C: hi ehm I just had a question ehm can you check if . I sent . two text

5 C: messages out to a certain number in the united states

6 O: [yeah

7 C: [can you check if ehm . that message was received?

8 O: . oh I can only: . see if you actually sent it I can’t see if it’s been delivered . so eh: . I’m

9 O: not really . the only way to really find out that is eh: . (to) download some sort of app that shows

10 O: your-your delivery status on-on each eh text message

11 C: even if it’s not through wifi?

12 O: yeah:

13 O: ‘cause there’s nothing really we can see here it’s just everything that’s been sent through your
14 O: phone we can see but not what’s been actually delivered to-to the other recipient
15 C: 2) okay ehm
16 C: well that doesn’t help me much
17 O: [no: I’m sorry
18 C: [ehm (but) what app do I need to download?
19 O: oh eh I-I only know that there is one I can’t really tell you the name eh I don’t really remember
20 O: but I know there is: ehm: some out there ehm actually just google it ehm: ’cause I don’t know which
21 O: one is the best but I know there is, some out there that- that tells you that: the time and, and
22 O: everything when your message has been delivered
23 C: /okay/

In the beginning of the excerpt in Example 2, the operator appears uncertain whether s/he will be able to help the customer with his/her problem. In the utterance in lines 8-10, the operator begins by stating his/her limitations by saying “oh I can only: . see if you actually sent it I can’t see if it’s been delivered” and later continues the utterance by suggesting an alternative solution, which is to “download some sort of app that shows the delivery status on each text message”. The utterance in the lines 8-10, however, contains elements which might be irrelevant to the conversation. “I’m not really . the only way to find out that is eh: . (to)” is contributing to that the utterance might not be considered a CIU, since it appears to be violating Relevance Theory. First, this part of the utterance is not required for the utterance to be understood. That is, it is redundant, since the utterance is likely to communicate what it meant to do, without this part. Second, this part of the utterance prolongs the conversation without adding new information. Finally, it is not contributing to that the information is being processed with as little effort as possible. Subsequently, it is argued that even without the grey marked part of the utterance in line 8-10, the operator would have communicated the same information and the customer’s reply in utterance 11 would likely have been the same. Moreover, in the utterance in the lines 19-22 a similar element of conversation can be found. Here, a substantial part of the utterance violates Relevance Theory, in the same manner as in lines 8-10. It is claimed that the customer would have retrieved enough information in a manner that would able him/her to perform the action s/he is asked to perform, as well as that the same reply would have been uttered by the customer in line 23, even without the grey marked parts of the utterance in line 19-22. These results are demonstrated in Table 1 (Example 2). The dialogue should also be considered more relevant without the redundant parts of the utterances since they contribute to a delay in the blending of the speakers’ mental spaces (i.e. the solution of the problem), and do therefore contribute to less positive outcome of the conversation (that is, the delay and the lack of efficiency).

4.3 Efficiency strategies and the Relevance Theory

In section 2.2, it has been mentioned that previous studies involve a highly valued feature of efficiency in call centre related conversations. As has been pointed out in section 2.2, efficiency does not always entail as few utterances as possible. For instance, repetition of the customer’s answers to important questions is, according to Cameron (2000), a strategy to gain efficiency, although it might initially increase the length of the call and thus appear to decrease the efficiency and thereby cause a delay in the achievement of a blended mental space. However, it is argued that this prevents the operator from receiving incorrect information. It helps avoid the customer’s additional call about the same issue since the problem has not been solved initially. This implies that repetitions help reach a blended mental space efficiently in the conversation. An additional method to test whether these strategies are useful or not, would be to apply Relevance Theory. As previously stated, this theory argues that in order for an utterance to be relevant, it can be processed efficiently, without difficulty, and has a
positive outcome. Thus, if these efficiency strategies affect the outcome of the conversation in a positive manner, it is argued that they should be considered relevant. In order to find further evidence for the answer to the first research question, data collected in this study are analysed below to explore whether any of these strategies might contribute to a blended mental space.

4.3.1 The relevance of repetition

The excerpt below demonstrates an example where the call centre operator uses repetition as an efficiency strategy and how this prevents a misunderstanding.

Example 3
11 O: perfect so eh the number (which you) eh eh: wish to port- what’s the number?
12 C: eh: zero seven six
13 O: zero seven six yes
14 C: zero eight eight
15 O: zero eight eight
16 C: zero six three one
17 O: zero six zero one
18 C: zero six three one
19 O: three one okay [sorry
20 C: (yeah)

Example 3, utterance 17, demonstrates how the operator is incorrectly repeating the numbers that the customer has just uttered. In the following utterance in line 18 the customer corrects the operator and thus, in this case, through the use of repetition the mishearing is instantly repaired and a misunderstanding is prevented. Thus, through the repetition strategy a mutual understanding between the speakers has been achieved and important conclusions could be drawn. Had the operator not used repetition in this conversation, it might have entailed that the operator would have processed the wrong number and that the customer would have been forced to make another call to have his/her problem solved. Thus, does the excerpt in Example 3 demonstrate that the use of repetition can increase the relevance of the conversation since it enabled a positive outcome for the two speakers.

4.3.2 The relevance of efficiency questions

Below, another excerpt demonstrates that asking questions to gain correct information is essential in call centre dialogues. Example 3 implies that the length of the conversation can be affected by the lack of this kind of efficiency strategies.

Example 4
4 C: /I think I’ve made a mistake because I bought a new two hundred crown ehm. ehm. what do you
C: call that? Refill?
O: yeah yeah that’s correct
C: but ehm I would like it to be for the programme that I can call abroad at lower prices and not eh
C: the regular eh programme that other programme that three has [...] mistake
O: are you still talking about prepaid or are you talking about a subscription with calling abroad?
C: ([no no prepaid] no, no,
O: okay still prepaid ehm well then you need to go back and you need to change the voucher
C: aha
O: kh-you bought the voucher in a store right?
C: yes yes yes ![cough]
O: okay then you need to go back to the store and you need to switch that voucher for a
C: ([okay) [...]]
O: that makes you call cheaper abroad
C: okay but I’ve, I’ve already ehm. I’ve already transferred the money to my three account [so it’s
O: ahh okay
C: already yeah
O: .(2) well that is different then ehm hmm let me see what I can do could you please just hold on for
C: /okay okay

In the excerpt in Example 4, the operator fails to retrieve all the valuable information from the customer and makes faulty assumptions about the condition of the customer’s problem. The operator assumes that the customer merely has bought, and not used, a new voucher for his/her prepaid mobile phone, in this case the wrong kind. Thus, the operator in utterance 13 and later in utterance 17 and 18, suggests a solution which posits that the customer should return to the place of purchase to exchange the voucher for the right kind. In utterance 21, the customer properly explains the nature of the issue, which is that s/he has already managed to refill the voucher to her mobile phone, which entails that the operator’s solution will not apply. In utterance 22 and 24 the operator understands this and realises that he needs to reconsider his previously suggested solution. This analysis indicates that if the operator had asked about the condition of the customer’s problem, i.e. whether s/he had used the voucher or not, as early as in utterance 13, instead of making the previously mentioned assumption regarding it, the dialogue could have been shortened by 11 utterances. Thus, the operator should have been able to omit the latter part of utterance 24. Subsequently, this excerpt implies that these 11 utterances are violating Relevance Theory, since they evidently do not have a positive effect on the outcome of the dialogue. Conversely, they are a cause for delay of a blended mental space for the two speakers. Through analysing Example 4, it is argued that ensuring questions can be a method of creating relevance in the input of the conversations, which both speakers will benefit from. As Cameron (2000) suggests, this strategy entails initially longer utterances, although, as Example 4 demonstrates, it does at length prevent miscommunication which will therefore increase the relevance of the input.
4.4 Correlations between CIUs and MLUs

It has been demonstrated in the previous sections how efficiency strategies and the use of CIUs can contribute to creating a communicatively relevant call centre conversation and a blended mental space. It has also been argued that the lack of these phenomena entail miscommunication and in some cases is a cause for misunderstandings. In this section the MLU of Example 1 and 2 is calculated in order to answer the second and the third research question stated in section 1.2. The MLU results are demonstrated in Table 2.

It is argued that, in Example 2, the customer and the operator appear to have reached a blended space by utterance 23, since the operator has presented a solution to the customer’s problem which the customer is accepting, or at least appears to have understood, by using the term “okay”. When having established that, the MLU can be calculated. Merely to calculate the MLU of a call centre dialogue might not be informative when presented by in isolation, since it can be challenging to argue whether or not an inferior or superior score of MLU is to favor in call centre dialogues. Through the analysis of the dialogue’s CIUs, this section will now resume examining the impact the use of CIUs might have on the MLU of the conversation. In the Tables 1 and 2 in section 4.1 the results of this analysis are demonstrated. Example 2 contains 252 morphemes and 11 utterances in total. By using conventional techniques when calculating the MLU, Example 4’s dialogue results in an MLU of 22.9. The analysis in section 4.3.1 suggests that this dialogue could have been shortened all together by 68 morphemes, without lacking any relevant information. Consequently, through removing the 68 redundant morphemes, but not any full utterances, the dialogue would get a lower MLU score. The MLU result would then result in an MLU of 16.7, which is a 27% lower score than the initial result. These findings make a few different indications. Firstly, this suggests that a higher level of CIUs will result in a lower score of morphemes. This is a claim that the excerpt from Example 1 supports. The final amount of morphemes in Example 1 is 286 when including the morphemes which, in section 4.1, were claimed to be non-CIUs. When excluding the morphemes which were not defined as CIUs, the remaining amount of morphemes is 258, which is a decrease of 28 morphemes. Secondly, the analysis of Example 2 suggests that a higher level of CIUs will result in a lower score of MLU. This claim, however, is not supported by the results of the analysis of the excerpt in Example 1. The MLU of the excerpt in Example 1 is 9.22 with CIU morphemes, whereas MLU count is 9.55 when having removed the non-CIUs. That is, the MLU of the excerpt in Example 1 will increase by 3.5% if the non-CIU utterances were to be removed. This indicates that a high level of CIUs in conversation does not always entail a lower score of its MLU. Arguably, MLU of a conversation does not merely depend on the amount of morphemes, but also on the amount of utterances. As Table 2 demonstrates, this entails that the MLU of a conversation will only be higher due to lack of CIUs if the redundant morphemes are only a part of a longer utterance, and not if the whole utterance consists of non-CIU morphemes. This analysis shows that there is a correlation between the use of CIUs and the result of the MLU, since the use of CIU appears to affect the result of a conversation’s MLU. However, it suggests that it cannot be calculated whether an inferior (or superior) result in MLU is a cause for a more efficient or functioning call centre conversation. Moreover, these results indicate that there is no consistent correlation between a conversation’s MLU and the achievement of a blended mental space for the two speakers. This is claimed since, as previously found, a superior level of CIUs in a conversation indicates a sooner achieved mental space blend. Thus, since the application of CIUs in a conversation does not always affect the MLU in the identical direction, it might be assumed that the correlation between MLU and a blended mental space is nonexistent.

5. Conclusion and limitations of the present study

The essay’s aim was to explore psycholinguistic processes associated with the blending of mental spaces. It was hypothesised that the use of CIUs would help the speakers to achieve a blended mental space. After analysing the data collected from the call centre dialogues, it was argued in section 4.1 that the results supported the hypothesis. It was found, in the analysis of Example 1 and 2, that the use
of utterances which violated Relevance Theory (i.e., utterances that were not defined as CIUs), appeared to be a cause for a prolonged conversation. Thus, the answer to the first research question was that the application of relevant utterances (CIUs) in conversation contributes to the achievement of a blended mental space and thus, that the lack of CIUs in the dialogue delays the mental space blending. Moreover, it was found that if the speakers shared structure from the generic space it helped in constructing relevance to the utterances and contributed to achieving a blended mental space.

When investigating the use of certain efficiency strategies, it was concluded that they appeared to have relevant purposes in the conversations. Data analysis suggested that efficiency strategies helped preventing misunderstandings and was immediately repairing mishearings. Hence, the efficiency strategies were relevant utterances which contributed to a successful outcome of the conversation. The dialogue which lacked those characteristics appeared to contain more misunderstandings and complications which resulted in a longer dialogue than necessary. It was argued that such dialogues had less successful communicative outcomes, since they were characterized by insufficient input. Subsequently, the application of efficiency strategies did contribute to the construction of a blended mental space between the speakers.

In order to answer research questions number two and three a correlation analysis of CIUs and MLUs as well as of MLU and mental space blending was conducted. The analysis indicated that the use of CIUs in call centre conversation did not entail an inferior number MLUs. It was found in Example 1 that the conversation’s MLU would increase by 3.5% if the morphemes which were argued to be redundant were to be removed. Therefore, it could not be argued that a superior number of CIUs would map into an inferior number of MLUs. Arguably, there was no apparent correlation between the number of MLUs and the achievement of a blended mental space. However, it was suggested that there existed a correlation between the number of CIUs and MLU of a conversation, since the MLUs values were different when excluding the non-CIU utterances.

Thus, it can be concluded that when the speakers in a call centre dialogue shared structure in the generic space as well as when their utterances were relevant (i.e., CIUs) a blended mental space appeared to be constructed efficiently. The purpose of efficiency strategies in that kind of discourse was to help prevent misunderstandings and repair mishearings which at length could have entailed a longer or an additional conversation. Those strategies conform to Relevance Theory and should be considered as contributing to a more efficient achievement of the blended mental space. CIUs had an impact on the count of MLU in a conversation. However, the use of CIUs, as was hypothesised, did not always map into an inferior MLU count. MLU values did not appear to correlate with the complexity of achieving a blended mental space.

There are certain limitations to this study which have to be taken into consideration. The participants used English as their second language (L2). This could entail, for instance, that the use of CIUs might decrease since expressing oneself correctly in an L2 often is considered more difficult than in someone’s first language (L1). It should also be mentioned that this is a small-scale study made within a limited number of participants. It might be argued that a more extensive study is needed to draw further conclusions about the discourse communication of call centres. Whereas this study’s data have demonstrated possible consequences of applying different strategies and concepts in call centre conversation, a more extensive study conducted over a longer period of time, and with more participants, will identify more patterns common in call centre dialogues.
References


Appendix

Transcription symbols

O  Call centre operator

C  Customer

[  The speakers speak simultaneously

/  In the end of one utterance and the beginning of the next utterance indicates an almost overlap in speech

.  Pause in speech less than 1 second

.(number)  Pause in speech the number of seconds the number indicates

(utterance)  Speaker says something very quiet

[...]  Speaker says something inaudible

- between letters or words  The speaker makes a self-repair

:  The utterance (last letter of the utterance) is dragged out

_  The utterance is stressed

{}  Indicates some kind of action from the speaker
Call 1

C: Hello do you speak ehm English?
A: yeah of course what can I help you with?
C: (eh) okay ehm I have problem with my: internet stick- 3G stick you know =ehm= eh: I buy the
A: =okay=
C: credit for-for one week I =put= the credit but she don’t like [...] to tell you the number from [...] to
A: =mm=
C: unblock my stick to put the credit
A: yeah of course I’m gonna help you I’m just gonna check here .(7)
C: I have the-the phone number from my [...] but if you don’t have to tell you who is the number
A: yeah exactly you co-could give me the number on the-on the card you bought
C: eh seven zero two three =eight= nine
A: =yeah=
C: eight three four
A: . could you repeat that?
C: ehm seven zero .
A: mm/
C: /two three
A: . yeah
C: eight nine =eight=
A: =mm=
C: =three=
A: =mm=
C: four
A: three four and there- on the- is that all the numbers?
C: . yes that is the number from my: eh sim card from . the 3G stick
A: okay ‘cause I’m talking about the: eh little piece of paper you bought that- the one with the [...] on
C: . what?
A: when you, when you have used this before . when filled it up with surf . =how= do you do it? Do
C: =yeah=
A: you do it on our website or:
C: on the website with a card, I have a card =or= if you like to tell you the number from the card and
A: =yeah=
C: you put it?
A: I’m gonna check here ‘cause if you can’t buy it on our website what you have to do is go to one of
A: our stores and buy like a: it’s like a little credit paper with a code on =it=
C: =yeah= have a code, I have a
C: code, I have a card with a code
A: okay so you have the code?
C: . yes =yes=
A: =cause that’s= {short laughter} okay ‘cause that’s wha-what I was asking for but if you-if you
A: tell me the code I try to fill it up from here- if you say the numbers
C: yes I see the number should I tell you?
A: =yeah=
C: =would= you like me to tell you? ehm . one eight zero =four=
A: =yeah=
C: zero two six zero four six nine seven .
A: mm
C: eight five
A: five . okay: . I’m gonna see here if it works .(11) okay . =I’ve= successfully managed to-to fill it up
C: =okay=
A: so just wait about like two minutes: and you will be able to surf just as usual
C: okay thank you
A: yeah no problem there-there’s nothing else you’re wondering?
C: no-no that’s all thank you =thank you= so much =bye=
A: =okay = have =a good day bye=

Call 2

C: Hmm yes hi I have {short cough} received an invoice from you and I . =wonder= what is it for?
A: (=okay=) {short cough} yeah
A: of course I’m gonna . take it up here and see =what amount is= on the bill?
C: =I have= eh nineteen crowns
A: nineteen crowns okay . let’s see here ,(11) there I can see it eh: have you paid this bill?
C: . sorry?
A: have you paid this bill?
C: no . because I was-I was traveling- I’m not using my three card because I changed employer so I’m
C: now without a =phone […]=
A: =yeah of course= I can see that as well, =because= . this: you don’t have to pay this
C: =yeah=
A: bill I can see that it’s already been removed in our system
C: so I don’t have to pay this?
A: no you don’t have to =pay it at all=
C: =okay= that is perfect then I’m cancelling it and also mm- but-but it’s fine I
C: […] since I’m not using the card I guess there […] because my phone is ehm: ge-getting returned to
C: my other company/
A: /okay okay/
C: /they will then take care of it right?=  
A: /yeah yeah =exactly yeah= 
C: =okay, then perfect=
A: ={short laughter} yeah very well=
C: =then it’s fine=
A: have =a good day anyway=
C: =thank you= you too thank you, =bye=, bye
A: =bye=

**Call 3**

C: yes: good afternoon
A: good afternoon
C: yes I have a little problem with my phone because: eh last month my:- I stopped the contract with
C: three =so I=-so I-I passed my contract to normal card
A: =yeah=
C: you know?
A: exactly a-a pay-pay card
C: exactly so-so the problem eh that- when you change during twenty four hours they give you like
C: other extra number . before they give you back the old number
A: . yeah
C: so-so now the problem is when I send my messages . or I call my friends or: (some) people that I
C: know they have the _old_ - they have the- this number that . I’m not using anymore you this number
C: that they give during twenty four hours
A: yeah =do-do= I can-I can help
C: =so:=
A: you with that Tamin . =what= you have to do in your phone . =ih:= this is actually in a- it’s only an
C: (=yes=) (=yes=)
A: iphone problem .
C: aha =okay=
A: =that’s= because your phone has saved your old number that you had in your subscription .
A: =what= we have to do is inside your phone in eh in settings in inställningar that’s what it’s
C: =aha=
A: called in Swedish inställningar
C: o-okay just give me one second I’m just gonna take [...]  
A: very good very =good=
C: =okay= inställningar okay
A: yes and under inställningar you have something called. telefon
C: telefon okay
A: and under telefon your old number will appear. you have to change it to your new number that
A: you’re using on your: eh-eh pa-pay card
C: .(2) no but-but-but the phone that:- the number that I want to use is my old number .(2) do you
C: understand me?
A: .(2) okay so. the-the old number that you’re using you’re: uh-what number do you
A: =currently wanna use?=  
C: =the number=-. the number that I want to use is the zero seven two zero one five two thousand
C: one
A: .(2) exactly but that-that-that isn’t showing up when you’re calling people right? It’s your other
A: number showing up?
C: yes =[...]=  
A: =yeah and that’s what you=, and that’s what you have to change in your telephone- iphone .
A: under
C: okay =so I-I-I enter=  
A: =you have to change so that [...]= two thousand one will show up instead
C: okay so I enter in inställningar then telefon the old number then change the number . =[...]=
A: =exactly=
C: =yeah=
C: =okay=- okay perfect . =thank you so much=
A: =very good= no problem =have a great day=  

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C: (=[][]=) you too bye bye ciao

A: hey

Call 4

C: hello hello
A: hello hello
C: ehm I have a little problem (cough) can I speak English? Do you speak English?
A: of course I do how can I help you sir?
C: yeah so I’ve got this: eh iphone five that: like two three- like: four days ago it’s been: from my old
C: iphone you have to transfer the: you know the: I have put the old iphone to the new iphone […]
C: iphone =but now= the problem is that: I receive my
A: =mm:=
C: sms on the old- on the- on the old iphone .
A: yeah/
C: /but I don’t get them on the new iphone
A: =okay I get it=
C: =ehm: and= and: it’s not: when people- when some people call it doesn’t sound . so I don’t
C: know if it’s related but .
A: it’s actually a setting in your new iphone that you have to do
C: okay
A: . and it’s: do you happen to have your new iphone there or are you calling from it or?
C: yes I’m calling from it now
A: (okay) what you do is: under settings . =it’s called= inställningar in Swedish {quiet laughter}
C: (=okay=)
C: okay
A: do you have it in English there or in swedish or?

C: (oh swedish) eh yeah but in English I will understand so I go to settings?

A: . yeah you go to settings and then you go to telephone

C: yeah

A: . and under telephone go there

C: . yeah

A: eh can yo-your number there

C: . yeah I don’t look at it now the- I will remember [...] 

A: ah okay okay under telephone . you should have your-your number that you want to use

A: =and also= if you can see your number there then you have to go under . eh behind-

C: (=okay=)

A: then you have to go back one step and go under messages .

C: okay

A: . and there you should also have send and receive and there your number= should be or else you

C: (=okay=)

A: don’t get the- get any messages to your phone=

C: /okay I see/

A: /eh and when-and when it comes to your old phone . you have to change are you using another

A: number in the new, in the old phone =or=?

C: =nah no= no it’s the sa- no-no it’s the same .

A: exactly exactly ‘cause you have to change so you don’t get it to-to-to your number in your old

A: phone . that’s why t-you’re getting the messages to your old phone because you have the number

A: eh written there under settings in the telephone and: =and=: 

C: =okay: I see=

A: =so= you have to erase it from there or else you’ll get all your messages =there=

C: =[...]= (=okay=) okay I see alright

C: but I will now I know so it’s nothing that you guys [...] to it’s just .

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A: yeah it’s just, it’s just that ={short laughter}=

C: =okay great= thank you so much/

A: /have a great day

C: okay bye (=bye=)

A: =thank you= bye

Call 5

C: Hi do you speak English?

A: yeah

C: hi ehm I just had a question ehm can you check if . I sent . two text

C: messages out to a certain number in the united states

A: =yeah=

C: =can= you check if ehm . that message was received?

A: . oh I can only: . see if you actually sent it I can’t see if it’s been delivered . so eh: . I’m

A: not really . the only way to really find out that is eh: . (to) download some sort of app that shows

A: your, your delivery status on-on each eh text message

C: even if it’s not through wifi?

A: yeah eh

A: ‘cause there’s nothing really we can see here it’s just everything that’s been sent through your

A: phone we can see but not what’s been actually delivered to-to the other recipient

C: .(2) okay ehm .

C: well that doesn’t help me much

A: =no: I’m sorry=

C: =ehm= (but) what app do I need to download?

A: oh eh l-l only know that there is one I can’t really tell you the name eh I don’t really remember

A: but I know there is: ehm: some out there ehm actually just google it eh: ‘cause I don’t know which

A: one is the best but I know there is . some out there that- that tells you that . the time and, and

A: everything when your message has been delivered
C: okay
A: yeah
C: thank you
A: thank you thank you
C: bye
A: bye

Call 6
C: Yes hello do you speak English?
A: yeah of course
C: good listen ehm: I-I’m receiving you know I’m seeing that the amounts from- from my wife’s mobile phone is being charged and so on but we can’t see that we’re receiving sort of the, the invoices anywhere . I think in the beginning they were sent as you know an sms but we-we tried to look for them but we can’t find them could you check if these invoices is being sent and-and eh:=
A: =yeah . yeah: it seems like . we’re sending an sms notification to number zero seven zero eight seven one one seven seven that’s what- what’s in the systems eh: =although=
C: =ca-ca=-so-sorry-sorry can you give me that number again?
A: zero seven zero .
C: yeah
A: eight eight seven one one seven seven ehich is one of the numbers: =eh:= =on your account=
C: =yeah= =yeah=
A: but you don’t receive these eh: =these invoices?= C: =no I-I= no that’s what- I mean that’s what we thought would be coming but my wife is checking them and she says she hasn’t received them . lately
A: okay ehm well . what we can do I can . try to . re-do this process and see if we, these sms
A: notifications will come up in the future to the phone but but what you can do you can

C: =yeah=

A: always log onto eh mitt tre eh eh from our website eh on mitt tre you can see all the the

A: invoices that you received eh on this=

C: =okay how do you log in do you need passwords and stuff to log

C: in there?

A: yeah you do eh you go to our website www dot tre dot s e yeah=

C: =yeah=

A: and up eh right

A: hand corner eh you have log onto mitt tre eh the blue little rectangle there eh click on that

C: =yeah= =yeah=

A: you’ll get uhm this pop up window which says register

C: yeah

A: you click on that and as you

A: have the [...] phone numbers=

C: =yeah

A: on this eh on your personal number=

C: =yeah

A: please choose the latter option which is for you who has two or more subscriptions eh and

A: register as an administrator it says so click on that fill in the form there name and you will fill in

A: email address and stuff like that and we will send you a password and log on to mitt tre you can

A: also choose to take this eh upper hand option which is if you only have one account eh=

C: =what eh=

A: then you can only log on and see one number at the time on mitt tre=

C: =wh-wha= but that that should be

C: okay but but you know for now I-I-I you know I-I-I’ve got ten thousand phones I-I need to fill out

C: all the [...]
A: ={low laughing sound}=
C: =I don’t wanna do that really I just wanted to receive the invoice =myself= could
A: =yeah=
C: you send it to my email address instead in the future?
A: . eh we can do it automatically . =eh:=
C: =yeah=
A: though but I can send you like, if you want this month’s eh: invoice or something I can totally send
A: you that by email right =now=
C: =yeah tha=-that would be nice [...] that one is huge and I need to
C: understand why actually so =[…]=
A: =yeah=
C: so
A: [...] do you have a, an email address that I can take, I can take right now and send it=
C: =yeah . yeah yeah . it’s: rikke as in that’s r i k k e
A: =kk e
C: yeah
A: =yeah=
C: =dot ralph=
A: =ralph
C: =that’s= r a l p h
A: yeah
C: and then there’s at .
A: yeah
C: gmail . =dot com=
A: =yes= .(2) a: lright and then l:- I will send you: this latest eh invoice by email in just five uh
A: minutes or so
C: yeah but is it possible to get it on that email address also for the future instead of the: sms that eh
C: doesn’t seem to work

A: [low sigh] well I can, I can put a sort of reminder on myself to send you the email, eh an email with
A: the invoice every month eh of course but =if something happens= we can’t do it automatically so I
C: =[…]=
A: can’t .
C: okay
A: I can’t promise you that it will be . done=
C: =uhm okay =tha, that doesn’t work= it has to be a process
A: =[…]=
C: you know that works so maybe it’s better that eh: yeah you just check why it’s stopped coming on
C: the: on the on the mobile phone=
A: =yeah of course
C: whe-whe-when are you- when are you usually sending it out on the mobile phone
A: . eh eh which date?
C: yeah
A: eh: it’s supposed to be sent: the day that eh: . the: invoice itself is being sent out which was eh the
A: eighth, eh the eighth of eh: January this month it was the same for December the eight
A: =and: [...]=
C: =okay okay so around= the eighth=
A: =around the eighth =[…]=
C: =okay okay= okay so we’ll go back and check that [...] 
A: yeah=
C: =but that- that’s okay but d-do you have the invoice in front of you can you see what, =what’s= [...] 
A: =yeah=
C: =[…]= it can be so high we need to find out what to, what to do about it so can you, can you check:
A: =mm=
C: what’s [...] the high cost is it: data transfers or is it eh . [...]calls
A: yeah it’s the phone calls to foreign countries eh: definitely eh it was: phone calls to: somewhere
A: abroad for: a total sum of 1449 crowns . eh I can check exactly wha-what country it is if you
A: =want to=
C: =yeah ih-ih=- it’s probably Denmark=
A: =yeah: it’s Denmark
C: yeah we’re pretty sure about that but can you see the subscription [...] ‘cause I want to change it
C: to a cheaper subscription eh when we eh: when we were calling eh you know we did that just [...] C: back eh: where there was supposed to be a cheaper invoice when you call mobile phones in
C: Denmark could you see if that has been done [...] =[...]=
A: =yeah I can see=. there was: something add-
A: added that’s: three calls norden eh: =yeah=
C: =yeah=
A: that- that’s been added it was: a couple of months ago =I can see= =yeah=
C: =exactly= =so-so-so-so= that one has
C: been updated now? That is the one we have been wanting on which is supposed to be the- be the
C: cheapest one I suppose yeah for the=
A: =yeah it is a bit cheaper eh when you call to- =to= the Nordic, the Scandinavian countries yeah
C: =yeah=
C: okay so that one is added?
A: yeah
C: okay but: we eh: yeah just if you could send me the invoice here eh this is the- the first time (and)
C: we’ll check if it- if it comes and then try to reset it and so on so we receive it as an sms in the
C: future as well then
A: yeah yeah absolutely and-and: of course: log on to mitt tre or eh: get yourself an-an
A: account on mitt tre =eh:=
C: =yeah=
A: and you can see all the invoices there as well as =if something is wrong=
C: =right right= right I-I-I might do that in the future

C: =I= just have so many (you know) . passwords and stuff =like that= it’s just you know yeah

A: =yeah= =yeah=

C: impossible almost […]

A: =understand yeah=

C: =okay= =okay good=

A: =yeah=

C: =so= so I’ll wait for that; that invoice thanks so much

A: (=yeah=) yeah thank you=

C: =thank you bye bye

A: bye bye

Call 7

C: Hey do you speak English?

A: Absolutely what can I help you with?

C: Okay ehm: I have a: blackberry which has been: I entered the wrong pin code =and:= I also entered

A: (=mhm=)

C: the wrong puk code several times but . but now I found out it was not- it was the wrong phone .

C: =or something= so: can you provide me with a puk code if:- for this phone number?

A: =okay=

A: yeah: absolutely okay do you have a business name?

C: . yes it is: life dot lohm =o eh-= h m

A: l =o o m= (okay let’s see) (2) okay do you have a- is it with a: domain

A: bah- by you =[…]=

C: =yes it is= =with a:=

A: =okay=
C: yes it is
A: life dot
C: .(2) ehm lohm l o h m
A: l o h m yeah
C: (yeah) .(2) yeah
A: at biogen: gen:/ 
C: /at bargin dic dot com/
A: /yeah dot com =okay= 
C: (=yeah=) I can also give you the sim number if you want to
A: ehm: yeah we can double check that as well/
C: /yeah
A: you can give me the four last digits: 
C: the four last digits is seven six six seven
A: yeah perfect okay eh: then I’ll send you the code here and you’ll have it in a few minutes
C: okay cool thank you =very much= 
A: =any= anything else I can do for you? 
C: no that was it for- for today . =I hope= 
A: =then I wish you= a nice day 
C: okay thank you 
A: thank you 
C: =bye= 
A: =bye bye=

Call 8

C: hey
A: hello hello how =can I help you?= 
C: =eh:= eh: I want to: change my mobile number to another one can you help me
C: with that?
A: . eh yes y-you want to exchange the number for another existing number from another operator
A: or =you wanna change=
C: =yeah yeah exactly=
A: . you want to port the number to yo- to your subscription is that correct?
C: yeah exactly
A: perfect so eh the number (which you) eh eh: wish to port- what’s the number?
C: eh: zero seven six
A: zero seven six six yes
C: zero eight eight
A: zero eight eight
C: zero six three one
A: zero six zero one
C: zero six three one
A: three one okay =sorry=
C: (=yeah=)
A: so: and eh this number eh if- you wish to port this number to the number that ends with fifty five
A: thirty six is that correct?/
C: /yeah exactly yeah exactly
A: perfect so eh I will place an order for this ehm: for this number
C: =aha=
A: =and you will= first off get an: confirmation: eh-text message sms
C: aha =okay=
A: =that:= that: we received your order that you wish to port the number from your previous
A: operator
C: aha/
A: /and after this . you will get a confirmation =however= it was possible to port the number . or ih-
C: =mhm=
A: and if it was possible you will get a date and a time signature when =the number= will be ported
C: =aha=
A: otherwise if it wasn’t- ah-ah- if it failed- it was unsuccessful it will also be said in this text message
A: why
C: aha/
A: /which reason . =so= but I’ll place the order now and: you’ll get two me-messages within: this day
C: =okay=
A: . okay?
C: okay thank you very much
A: no problem have a lovely day now bye bye
C: you too bye

Call 9
C: eh hello hi
A: (yes)
C: I was just wondering if I had eh: any unpaid bills or anything?
A: yes ehm yeah what I can see is the bill that was supposed to be paid . in January
C: aha: okay but eh: there was one uhm payment that I- . I wanted to send eh: it’s-it’s one thousand
C: five hundered and six
A: yeah
C: okay so ih-it’s that the one that you’re looking?
A: yeah that’s the one that-that’s missing but have you paid that one?
C: eh: yeah I think it’s going to be: eh: over there eh: next Monday =eh= not next Monday but
A: =okay=
C: Monday yeah

A: yes okay eh well then it shouldn’t be a problem =ehm:= it can take up to three banking days for

C: =yeah=

A: the payment to . come to us

C: aha okay

A: (yeah)

C: mm: eh: so payment days you mean maybe it’s going to . take- eh it’s going to be there on

C: Wednesday or Thursday

A: .(2) ih-if you pay today: =or this:=

C: =oh= actually ih-it’s- it’s still pen- it’s still pending on my eh bank account

A: okay

C: but I have ready- eh: how do you say eh: from my internet banking

A: =yeah=

C: =it’s:= it’s waiting to be sent

A: . okay =well then= it should probably be sent from your bank account on Monday and then it will .

C: =yeah=

A: be: be with us within the next week

C: okay =but= eh is this the only invoice I have now?

A: =yes=

A: . yes: that’s the only one that hasn’t been paid yet

C: okay =[...]= 

A: =that’s the one= in- for February but that’s- {short laughter} that’s still a while

C: aha okay I see ehm: well mm: .(2) okay

A: (yeah)

C: but ih-is there going to be any fine because I-I’m kind of late right?

A: . yes it’s a bit late I can see I don’t think any:- any reminder has been sent out yet

C: (no)/
A: /and I can- I can hold your invoice so:

C: okay

A: that it won’t

C: {inhaling}

A: no-no- no reminder has been sent out

C: =thank yo-= thank you so much

A: =[...]=

C: thank you so much

A: =have a:=

C: =and eh:= and you too have a good weekend

A: yes yes you too thank you

C: good =bye=

A: =bye=

C: good bye

Call 10

C: eh hello I have a prepaid connection to three

A: =yes=

C: =and= actually this is the third time I’m calling today I called an hour ago and I was told that: ehm

C: eh-eh: I was going to get a call back =but= I haven’t yet so could you please check if: .(2) I-I guess

A: (=okay=)

C: you can see what the problem has been so that I don’t (=eh=)

A: =yes= of course I can- I can see that you

A: have talked to my colleague here =and:= then the- that the person was going to help you

C: (=yeah=)

C: yeah/

A: /to change: a =voucher code=
C: =yeah= yeah

A: yes and the person- I will: contact this person to see that: he has do- eh done the things that you
A: have to eh: solve this problem
C: okay
A: and then I will eh tell him to call you back
C: okay please do =because= I-l- they said they were going to call me back in ten minutes and it’s:
A: =[…]=
C: been an hour and I’m just- I-l-I’m just worried so I wanted to see if everything is going okay
A: oh yes I’m sure- I will tell him to call you right now
C: okay =alright= {laughter}
A: =yeah=
C: thank you
A: thank you bye bye/
C: /thank you bye bye . bye

Call 11

C: yeah hello ehm I have a questions for you
A: yes of course
C: how do I become the administrator for my account?
A: on: m-my three?
C: yes
A: yes okay what you have to do is enter our home page
C: I’m there
A: and then click on this log onto my three
C: done that
A: and then register
C: how do I do that?
A: . and then register an administrator

C: eh where is that? I don’t see that: on the home page?

A: on the home page under the blue button on the top on the right screen

C: mm okay . eh {humming 1.5 sec} . on the home page . before eh-l log in?

A: . yeah just- just three dot s e

C: okay so that’s before I log in okay [...] just three dot s e: .(2) ooh:kay: ehm: .(2) is it under

C: customer service or where is it?

A: no just at the right top on this log onto my three

C: okay

A: (yeah:) do you see a new white screen (=coming up=)

C: =oh yeah= oh yeah okay it says register there okay

A: yeah and the register

C: okay:/

A: /and then register administrator . and then you have to enter your name last name personal

A: number and then an email

C: mhm =[…]=

A: =so what’s=

C: how quick is that? How quick will it uh-update?/

A: /yeah once you’ve done this registration you will get a from us maybe two or three days from now

C: (=mhmm=)

A: =and which= will give you a- a special code to log in with your email account ‘cause that will be the

A: administration name ehm for you subscription so once you’ve received the letter you can log in as

A: an administrator

C: okay/

A: (/ehm) but before then you will have to go with the: specific numbers every time you log in

C: okay now (eh) different question for you [...] ehm: I wanted to set my: family up with the: family

C: three plan
A: mhm

C: ehm could I just do that with you?

A: yeah of course I can help you with that

C: okay great

A: yes: let’s see here which number should: pay for this- this =[

C: =the-that’s gonna be the one I’m

C: calling from right now the zero seven two . zero four . zero three . nine three three

A: yes okay perfect and do you want to add a member or is two cellphone numbers good =enough=?

C: =there’s=

C: two on my account zero seven two zero three nine five zero nine five

A: yes exactly

C: =that [...]=

A: =you only want= those two

C: no there’s another one too

A: okay =I can= take the number

C: =ehm= zero seven zero .

A: yes

C: four nine

A: yes

C: eight nine

A: yes

C: nine nine six

A: nine nine six perfect . okay and do you have a number that is a:- a normal phone line you know

A: this: land line

C: ehm: let me get that real quick ehm: .(3) {{talking to someone else}; ehm what is:- what’s our

C: home phone number? . okay good) it’s: zero eight six oh one

A: yeah
C: two six. =six two=

A: =yeah= six two okay perfect [...] go activate it today so you should probably s- you should

A: probably get this- a-a text message within . an hour or so and then you can start just calling

A: . =to everyone=

C: =okay=

A: and it takes very fast

C: excellent

A: yeah perfect anything else you . need help with or something?

C: ehm no: [...] I’m just gonna try and s-set up a administrator but = [...] =

A: =yeah=

C: but I mean I’m good now

A: yeah perfect {quick laughter} then have a nice day

C: thank you

A: {quick laughter} thank you bye =bye=

C: =bye bye=

Call 12

C: Hey [...] my name is Andrew is it okay to speak English?

A: Yeah of course/

C: /yeah perfect ehm I’ve

C: got a problem with my iPhone I don’t know if it’s good to go to you or to go to like an Apple store

C: but ehm I will tell you what’ve happened and/

A: /=yeah=

C: =I’ll= see if you can help me out ehm . stupid thing I have a passcode on my eh on my iphone eh

C: like a security like a four digit =code security=

A: =alright [...] =

C: /for the phone ehm now I was walking this morning and I had my hand in my pockets and my

C: phone in my pocket at the same time eh I’ve taken it out and now it is-(is) telling me that the sim
C: has been locked. So I assume what I’ve done is that I’ve entered in ehm: the passcode too many times. Would that be correct?

A: Alright, well is, is it the pin code or the actual is it like a =password for the phone=

C: =it says it says = the sim is locked inve eh

C: ah sorry in-in-insert a valid sim with no pinlock to activate the iphone .(3)

C: I =don’t know [...]=

A: ‘cause ehm what we wanna know is if you locked it with your pin code or is it like a password code ‘cause if it’s the pin code then you just need to enter a PUK code . and: eh if it’s a password code: a code that you choose by yourself we need to actually reset the whole phone/

C: /okay

A: /through itunes=

C: =I-I-I be= I believe it would be the ehm pa-password it’s my own four digit number I put in as like a security number/

A: /okay/

C: /eh: I assume it’s that ‘cause it was- it was on in m-pocket so I don’t think I’ve eh it was definitely on this morning when I put it in my pocket so it’s not been turned off and turned back on again/

A: /Alright what we need to do the-then- we need to actually plug it in to the computer and through itunes we need to reset the phone

C: okay ehm . can you give me two minutes I need to go grab a, a plug in for it=

A: =yeah =(of course)=

C: =is that okay?=/

A: /yeah of course/

C: /thank you so much .(82) okay sorry to keep you waiting

A: yeah/

C: /and then I’ve plugged the phone in and I’m on my work computer so I may not have itunes installed so I might need to . I might need to install itunes as well .

A: okay well basically what you wanna do is =you want to=

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C: =yes tell me=
A: /ehm you want to plug it in/
C: /yes/
A: /and then you just want to: well reset the phone and update it ehm you might have to put the
A: phone in a-ehn DFU mode and that means eh pressing both the buttons and ehm =and then you=
C: =the home= and
C: the power button?
A: . sorry?
C: the home and the power button together yeah?
A: yeah yeah =press ‘em= at the same time and then releasing the: eh home button and keep
C: (=yeah=)
A: pressing the power button for about five seconds/
C: /=okay=
A: =and then= we’ll put the phone in a DFU mode
A: and then we will be able to reset it eh without any problems in =itunes=
C: =okay=/
A: /eh that’s basically what you wanna do and then it will be able to get working and if you have a . a
A: copy of the phone on itunes you can just put it back on the phone otherwise ehm maybe on icloud
A: or something like that/
C: /yeah/
A: /guess you’ll figure that out when you’re =all set=
C: =when= when it resets yeah/
A: /yeah/
C: /okay eh eh yeah it has to be done through a computer right? It can’t be =done= any other way
C: no?/
A: =yeah= /no sorry
C: okay no that’s cool no worries alright well I appreciate your help on this eh eh thank you so much
C: =ehm=
A: =yeah= you’re welcome
C: yeah cool have a good day {laughter}/
A: /the same =bye=
C: =bye bye=

Call 13

C: oh yes hi eh I-I have a connection a prepaid connection with three- with eh tre =and=
A: =okay=/
C: /I think I’ve made a mistake because I bought a new two hundred crown ehm . ehm . what do you
C: call that? Refill?
A: yeah yeah that’s correct
C: but ehm I would like it to be for the programme that I can call abroad at lower prices and not eh
C: the regular eh programme that other programme that three has =[...] mistake=
A: are you talking about a-
A: are you still talking about prepaid or are you talking about a subscription =with calling abroad?=
C: (=no no prepaid=) no, no,
C: no prepaid
A: okay still prepaid ehm well then you need to go back and you need to change the voucher
C: aha
A: kh-you bought the voucher in a store right?
C: yes yes ={cough}= 
A: =okay= then you need to go back to the store and you need to switch that voucher for a
A: . different one if you bought the well regular kind =you need to switch it for= =ehm well that kind=
C: (=okay=) =[...]=
A: that makes you call cheaper abroad
C: okay but I’ve, I’ve already eh . I’ve already transferred the money to my three account =so it’s
A: =ahh okay=
C: already= yeah
A: (2) well that is different then ehm hmm let me see what I can do could you please just hold on for
A: a second?
C: okay and I just need to ask you if eh eh three Prat is also eh giving me free internet for a month?
A: . well, this voucher code?
C: yes eh eh not the voucher code is the eh problem it’s three Prat =is [...]=
A: =okay= eh is it a prepaid or is it a
A: =subscription?= 
C: =[...]= it’s a prepaid
A: a prepaid well it gives you ehm seven free days . ehm when you buy the start package for the
A: broadband- the bre prepaid broadband ehm . so well yes seven days a week
C: only a week oh no no okay [...] I need me, le le, let me see then what we can do so that I can
C: change it to the other eh programme
A: . ehm yeah yeah I’m gonna take a look at that just hold for a second and I will be right back
C: thank you thank you
A: (3 mins, 15 sec) [...] thank you for waiting =ehm well= I’ve eh I’ve switched the eh voucher =so in=
C: (=no worries=) =aha=
A: about thirty minutes you will have the eh three prepaid global two hundred crowns/
C: /okay alright thank you very much so-so this will be automatic then I don’t have to do anything
C: else?
A: no you don’t have to do anything just well don’t make any eh out of borders calls yet/
C: /okay okay/
A: /yeah since I’m gonna change the [...] in about thirty minutes
C: okay and I-I and ih is this included that I have free internet access for one month?
A: yeah that is correct/
C: /mhm alright thank you very much you’re very nice
A: {laughter} you’re welcome
C: have a nice weekend thank you =bye bye=
A: =th-the same bye=

Call 14
C: hi Eric {cough} I have a problem with my phone ehm =that I have through you= eh I have eh . eh an
A: (=alright=)
C: apple iphone
A: okay
C: that I got through you and: I have just recently received something from Apple that told me that
C: there’s a new eh what do you call it? An ios six point one
A: alright
C: yeah I’ve updated to that now ehm that was about I don’t know five days ago or something
A: okay
C: and since I’ve done so now my phone the battery life is eh it’s just quite frankly it’s just not
C: acceptable {sigh} it’s a- it lasts for two hours and then it’s over . =ehm=
A: =ah okay=
C: yeah it gets very hot I don’t know why it gets very very warm and then it- the battery is very very
C: short
A: . okay ehm I haven’t heard that before I must say
C: okay/
A: /ehm . =[…]=
C: =I read on= I read a little bit on the net now that say that some that- eh some people have
C: had that problem but eh {sigh} in the end of the day I need a phone that works so eh =I just=
A: alright

C: wanted to [...] what I could do about that yeah

A: yeah the thing wha-what we could do let’s see it’s an: four S I just need to check the.ehm

A: warranty real quick here ehm well the phone past the warranty date about a month ago

C: ah typical

A: eh and: well th- well then we can’t really send it in on the warranty service ehm we could actually

A: we could send it in on service that we could ehm but =what we= want to try to do is well restore,

A: reset it and update it to

C: [...]=

A: get rid of the problem we [...] make it eh.

C: so what you’re saying is that if I send it in for service [...] I-I have to p-pay for it is that right?

A: yeah they’re gonna- they’re gonna charged you for it the =the shop eh= =and: [...]=

C: =okay= =that can’t be= that can’t

C: be right the-there has been n-nothing wrong with the phone at all and now all of a sudden since

C: I’ve changed to that new . ehm p-put the new IOS on it it must be an Apple thing

A: yeah it prob-probably is the thing what you could do is: well we can always try to reset it and see if

A: the problem goes away eh and then update it back again . = [...]= =we’re talking about=

C: =but what= =if I reset it=

A: (ah) sorry

C: . if I’m- if I reset it aren’t I gonna lose all my contacts and all the information/

A: /well yeah yeah you are tha- we want to make a . a copy of them in itunes . so

A: =yeah you make a copy=

C: =okay so all !-= okay so all I have to do is to connect it to e-e connect it to my computer and it’ll-

C: it’ll synchronize with itunes then yeah?

A: yeah: but you want to make the copy I think the synchronization will not be entirely ehm . how do

A: you say well it won’t be entirely safe =we want=

C: (=okay=)
A: to make a security copy of it and then you just write quick on the actual ehm. on the actual
A: iPhone in iTunes and then you make a copy of the phone. =and then you rese= - reset it and
C: „=okay=
A: update back again
C: okay okay
A: eh we want to try that before we do anything else ’cause you don’t wanna pay a lot of money and
A: then you could have solved the problem by just updating it =and=
C: ={sigh}= no quite frankly to be honest
C: I’m-I’m not going to pay a lot of money I will- I’ll end up just screaming at you and because I-I don’t
C: think I should pay anything I didn’t- there’s nothing- I haven’t done anything to the phone. it’s just
C: when I’ve updated this all of a sudden the
A: no
C: the battery life is just: […] it’s just two hours. I-I took it it was a hu-hundred percent here about a
C: half an hour ago. and now it is sixty percent. eh and very hot the phone gets very hot I don’t
C: know why the heat is there as well yeah but eh/
A: /(I) understand ehm well ehm .
C: but I think that’s a good idea I think eh I could probably try to rese-set it and: - and do that so I’ll try
C: that this evening, later on this evening when I get home/
A: /yeah hopefully that will solve it
C: that might- that might do itself yeah but if you say if I copy it I won’t lose anything?
A: no exactly if you copy you won’t lose anything but remember to that ’cause otherwise I think you-
A: everything will be lost
C: (okay) and […] to do that then I reset the phone and then the phone will be empty
A: yeah/
C: /and then- and then what do I do? How do I . put it back?/
A: /well actually we want to update it you-you just in iTunes you can . ehm . well you can . update it
C: from the actual copy that you made of the phone ehm/
C: /okay
A: yo-you’re able to do that when you start the phone- when you’re activating the iphone you can do
A: that ehm it’s gonna be one of the options on the screen
C: okay okay . I don’t sort of use it with . i-tunes that much in fact I . it’s probably not good but I
C: haven’t had my phone connected to my computer for a year now{nervous laughter}/
A: /oh okay
C:so well mm okay then
A: yep/
C: /I’ll give that a try and ehm if I have any problems or something I’ll call back
A: yeah of course
C: great
A: yeah
C: thanks very much
A: you’re welcome
C: bye then
A: bye

Call 15
C: Hi my name is Matt [...] is it okay to speak in English?
A: yes of course of course how can I help you sir?
C: ehm we’ve tried to ehm . to put some money on the . three prepaid card/
A: /yeah/
C: /but unfortunately we failed ehm/
A: /okay/
C: /because we= ehm: . used the three times twenty minutes time . trying to do that so we can’t just
C: go to three dot s e =three broadband= . ehm/
A: =ah okay okay= /alright
C: [...] go to a website is it possible to do it by the bank or the credit card [...] we’ve got this nice like
C: fifteen digit . =[...]=
A: =okay= so if you want to I can give you . ehm twenty new minutes .
C: or maybe you can just [...] for me? =I’ll give you:=
A: =ehm:= ehm do you have like a voucher code?
C: me?
A: have you bo-bought this refill card?
C: yeah [...]  
A: have you bought this or:
C: yeah
A: okay and what co- what number do you have?
C: . zero seven zero four five six one eight eight six . =[...]=
A: =ehm:= could you take it from the beginning?
A: =zero=
C: =absolutely= zero seven/
A: /yeah
C: zero four five six/
A: /zero four five six
C: one
A: one
C: eight eight six
A: eight eight six . yeah alright ehm and then did you like buy a receipt with a: . =reference number?=  
C: =[...]= . so I’d get
C: these numbers/
A: /yeah
C: eighteen
A: eighteen
C: o two
A: o two
C: o four
A: o four
C: thirty one
A: thirty one
C: double o
A: double o
C: thirty four
A: thirty four
C: o fifty six
A: o fifty six. okay so let me see there .(2)
A: alright so ehm it should work in: about ten minutes
C: okay perfect
A: alright was there anything else I could help you with?
C: ehm . yeah actually yes why not ehm: . but I should talk to the- to the company service so:/
A: /yeah?/
C: /I-I can take it tomorrow I won’t bother you too much/
A: /ah okay okay alright then . =have a nice day=
C: =thank you so much= for your help . =thank you bye=