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## **The weblog as an immersive space: Moblogging Jokkmokk 2004**

The weblog is rapidly becoming an effective immersive environment due to the increasing use of still images, embedded video, sound files, as well as the use of portable devices, which allow for mobile, live posting. It is through the use of such methods that the reader experiences a greater sense of presence, thus prompting a greater rate of participation. The question of presence, and its importance to the maintenance of coherent, dispersive weblogging conversation, arose during our work with the experimental event weblog, Moblogging Jokkmokk 2004, where a team of webloggers and a weblogger-technician from Umeå University, HUMLab embarked on a journey to the north of Sweden to cover a Sámi cultural festival. The weblog received much international attention (The Guardian Unlimited Online, Smart Mobs, individual trackbacks) and through the use of various social enhancers, the Jokkmokk weblog became a meeting place for festival participants, international onlookers, and webloggers alike. In this paper, we have illustrated how methods employed in the Moblogging Jokkmokk 2004 project created both a sense of presence and space.

The paper is separated into three parts. Theories of presence and the linguistic theory of cognitive blending and mental spaces will be applied, along with practical examples from the Jokkmokk weblog. The first part of the paper will describe the project itself. The second part of the paper will define presence, co-presence, Weblog Presence, and their importance to the creation of a space in which interaction can occur. The third part of the paper illustrates a common space in which weblogging conversations are cognitively construed, despite the fact that these conversations rarely occur in the same physical, albeit virtual, space through Gilles Fauconnier and Mark Turner's theories of cognitive blending and mental spaces.

### **Part I: The 'Moblogging Jokkmokk 2004' project**

Jokkmokk, Sweden is a small town located just above the Arctic Circle. The town of little more than 6000 inhabitants receives an approximate 30,000 visitors annually for the winter market in February. The market began in 1605 when the Swedish king, Charles IX decided to expand his kingdom to the north, imposing taxes on churches and markets in order to finance his wars. Since that year, the market has been a meeting place for the Sámi people from all of Sápmi, a nation that extends from Norway into Russia. The market has evolved to become a cultural experience where one can find traditional Sámi wares marketed beside modern plastic goods. People from all parts of the world now attend the market in a celebration of cultural diversity. Average temperatures for the market can range anywhere between -10 and -40 degrees Centigrade, which proved to be technologically challenging.

The concept behind the project, Moblogging Jokkmokk 2004 began as an alternative to a road movie/documentary film. The team from Umeå University, HUMLab included the two authors, together with a third weblogger, and one technician. We attempted to capture the atmosphere of the market and present it to readers from around the world through our mobile, live-event weblog. The purpose of the weblog was not only to portray the event itself, but also to test mobile weblogging in the extreme conditions of the arctic winter, as well as an exploration of the weblog as a medium in live event coverage. We chose our equipment with the aspect of 'immediacy' in mind. Small, light units with multi-media capabilities were

optimal. The three webloggers were equipped with laptops, and our technician with a tablet PC. Everyone had a PDA and a mobile phone. Two of the phones were connected to GPRS, and one was capable of connecting to a PDA and GPS system, which documented our travel to and from the event. One account for audio weblog posts was created which could be accessed from each phone.

The technological considerations were many, as the communicative networks which support a town of this size can not always accommodate the large number of visitors to the market. Therefore, we could not rely solely on a single network to post to the weblog. As the physical market space covers just a few streets, we determined that four well-placed W-LAN access points would be sufficient for 'live' weblogging. Our goal, in order to create a sense of 'being there', was to weblog directly from the events. Several factors made this impossible. First, it took longer than expected to connect all the points due to unknown interference. Another factor which made live weblogging difficult was the poor placement of some of the access points, caused by our unfamiliarity with the market space. A major contributing factor, as we have previously mentioned, was the subfreezing temperatures. PDA weblogging with thick gloves proved to be difficult, and battery time on all the electronic equipment was short. The final test of the technological capabilities took place as the market was closed by a multi-cultural concert made up of international artists which we had permission to live stream. As the concert was about to begin, the already overloaded internet network collapsed, and all connections in the north of Sweden were broken. It was at this point our mobile phones, which we initially assumed would be the weak link in our mobile coverage, became invaluable. We used our audio weblog account to deliver parts of the concert to the waiting viewers, as well as to communicate with a weblogger back at HUMlab who could inform those viewers of our situation.

Apart from the technological problems, the format of the event itself made immediate coverage difficult. Many events occurred simultaneously with very short breaks in between. It was impossible to return to an access point and weblog about the event without missing the beginning of the next. In hindsight we discovered that better planning into the coverage and better distribution of the Webloggers probably would have allowed for more immediate weblogging. However, even if the coverage was not completely live, the group of webloggers were able to update the weblog often, allowing the readers dropping in on a regular basis to find new posts. Furthermore, it should not be overlooked that a sense of immediacy also can be achieved through for instance rich sensory stimuli. Thus, the multimedia reportage in our weblog played an important role in compensating for the sometimes lacking immediate updates.

Participating in the event, and evaluating both what worked and what did not work, led us to question what makes a weblog feel live. As will be shown in the following, immediacy is not the only way of creating a sense of presence in a weblog, but a number of different techniques can be employed for this purpose. One important such technique is to enhance the possibilities for social interaction. Communication between the authors and the readers became an important part of the weblog, both in influencing what the authors chose to report, and in creating relationships between the local community and the Webloggers. This proved helpful in gaining better access to certain arenas.

## **Part II: The importance of presence**

As computer-mediated interaction has become increasingly popular, the study of the sense of presence has gradually received more attention. Scholars from many different disciplines have approached the topic of presence and one reason for the great interest in the concept might be found in this quote from Matthew Lombard and Teresa Ditton (1997, 2), who claim

that “[a] better understanding of what presence is, what encourages and discourages it in users, and its effects, should save valuable time and money and improve the end-product in the design of new and the redesign of current media technologies.”

The diverse approaches to presence in combination with the fact that presence is a relatively new area of research has resulted in many different definitions of the concept. Some focus on presence in relation to place, as for instance Jim Blaskovich (2002, 129), who argues that there is a general agreement among presence researchers that presence refers to “a psychological state in which the individual perceives himself or herself as existing within an environment”. Experiencing presence in a virtual environment thus implies a sense of transportation.

The definition that best represents our view of the concept stems from Lombard and Ditton (1997, 9), who claim that presence is “the perceptual illusion of nonmediation”. All communication is of course mediated, but in this context, *mediation* refers to mediation through technology. They argue that presence is related to both intimacy and immediacy and claim that there are two ways in which a feeling of non-mediation can be achieved: *presence as invisible medium* or *presence as transformed medium*, whereby the latter implies that the medium acts out a role in the social interaction. From this follows that presence is dependent on both the constraints and abilities of the medium, on the content of the interaction and on user traits. This definition does not exclude the previous one, but rather we argue that only through an illusion of nonmediation one is able to experience a sense of being in a space other than the one in which one is physically located at the moment.

Several researchers of the sense of presence focus on how sensory stimuli enhance the possibilities to experience presence. For example, Barbara Becker and Gloria Mark (2003, 30-31) argue that graphics and audio create a higher sense of presence than graphics and text, which in turn allow for a more presence-rich experience than text-only media. Marie-Laure Ryan (2001, 121) represents an opposing view, and discusses “presence of the textual world”. She argues that spatial immersion, and thus a sense of presence, may well be experienced through purely textual media. Douglas Galbi (2003, 121) advocates a middle road, and claims that all different types of media can create a sense of presence, but at different costs: “a greater sensory scope reduces the bodily work required to make sense of presence” (p.7).

In the introductory chapter of his anthology on interaction in collaborative virtual environments, Ralph Schroeder (2002, 4) defines the concept of co-presence as “being there together”. In Schroeder’s view, not only immersive virtual reality systems can cause a person to feel present, but through co-presence, also less immersive systems can provide this experience. Traditionally, presence has mainly been studied in immersive virtual reality systems, but theories of presence have now been applied to desktop systems as well. (Schroeder 2002, 4) Some of the media which previously have been subject of investigation include collaborative virtual environments (Schroeder 2002), chat rooms (Braham and Comerford 1997), video conferencing (Bocker and Muhlbach 1993) telephones and photographs (Galbi 2003), and novels (Ryan 2001). To our knowledge, however, no studies that discuss the causes of presence in weblogs have so far been conducted.

In the present paper it is argued that the fact that the weblog represents a hybrid medium makes it essential to examine what causes a sense of presence in this particular type of virtual environment. Presence is important in any type of communicative environment, and by investigating what creates a sense of presence in a weblog one can draw conclusions about how to best enhance the potential of weblogs in creating an immersive experience, something which will most likely allow for lively and involved interaction. We focus on the features of the weblog medium to estimate the degree of presence it induces its participants to experience. In doing so, we build on previous research on presence, and our own experiences from the Moblogging Jokkmokk 2004 project. It would have been useful with

information from the readers of our case study weblog on how they experienced it, but including a questionnaire was not within the scope of this study. In future analyses of presence in weblogs, however, such measurements would be valuable in the verification of the results.

## **Weblog Presence**

As will be shown in the following, there is not just one way of achieving a sense of presence in a weblog, but instead webloggers may employ a number of different techniques to allow the visitors to their weblogs to experience a feeling of being immersed into the scene. However, before turning to the causes of presence in weblogs, we need to define the specificities of the type of presence you can experience in a weblog. This will be done by introducing the concept of Weblog Presence.

Weblog Presence is the sense that readers and contributors of weblogs experience, when accessing information and interacting with others in weblogs, that causes them to feel as if they were actually moved into the shared space that the weblog represents. The qualities of the weblog medium are crucial in the creation of this experience. The combination of the use of immersive media- and content characteristics with social interaction allows for participants to feel transported to the scene of events through the weblog as a medium (presence) and for this to be a shared experience (co-presence). Only through the combination of these two types of presence one can experience Weblog Presence. Not all weblogs are able to combine these two senses of presence, but we believe that the specific characteristics of the event weblog make such a meeting possible. The immediacy of the event weblog helps turn the weblog into a lively virtual representation of the physical space, and through nearly synchronous communication you are able to share your experiences of this immersive space with others.

In the following we will list a variety of causes of presence in weblogs. The causes will be divided into two groups: those that generate a sense of presence and those that generate a sense of co-presence. Two clarifications are needed here. First, each of the causes can allow for a sense of presence or co-presence on its own, and second, these factors can also cause a similar sense of presence in other media. However, what is distinctive about this type of presence is the certain ways in which these causes can be combined through the weblog medium; only through a combination between at least one of the causes of presence and one or more of the causes of co-presence does one take advantage of the weblog as a medium.

### ***Causes of presence in weblogs***

The causes of presence in weblogs are here summarized as six 'I's': *Interaction, Immediacy, Immersion, Intimacy, Involvement* and *Individual user preferences*.

#### ***Interaction with the medium***

According to Lombard and Ditton (1997, 17), most of the research they have surveyed has "either implicitly assumed or explicitly suggested that a major or even the primary cause of presence is the ability to interact with a mediated environment." It could be argued that by letting several people tell the same story but from different perspectives, and by archiving this material according to author, dates and categories, the number of navigational options will increase, which will allow for a more personal approach to the material.

#### ***Immediacy***

Lombard and Ditton (1997, 4) claim that one important factor in order to experience presence is immediacy. One way in which immediacy can be created is by supplying enough sensory input to give participants the illusion that they are actually taking part in the event. Much

previous research has concentrated on how rich sensory input helps create a higher sense of presence. For instance, Galbi (2003, 155-121), who in his economical model of presence focuses on costs, argues that making sense of presence in black and white requires more bodily work than making sense of presence in color, and more bodily work is required to make sense of presence in text or audio than in audio complemented with pictures. As mentioned in part I, audio posts using the tool Audblog played an important role, especially when other technology failed. One of the readers of the weblog commented on an audio post from the final concert of the market, and claimed that the audio made her "FEEL the cold in these haunting songs" (truna, February 7, 2004. <http://blog.humlab.umu.se/jokkmokk2004/archives/000335.html>).

Another way of achieving immediacy is by making participants feel as if they are part of an event by providing them with immediate updates. According to Lombard and Ditton (1997, 19), if participants know that an event has been recorded, the ability to experience a sense of non-mediation is limited. In other words, live reports have a greater potential to create a vivid illusion of non-mediation. Mobility is a method which can be employed to create this experience.

### ***Immersion through text***

A large majority of weblogs today are still very much textual, and in a time when multi-media content is increasingly gaining ground, a reminder of the power of text in creating an immersive experience is important. Ryan (2001, 122) claims that language, unlike pictures, has a way of distancing its readers from the actual scene of events. However, instead of claiming that language cannot create a sense of presence, she claims that the major challenge is for language to find ways to "coax the imagination into simulating sensory perception" (p.122). One strategy which might help ease this process is by including much detail in the descriptions, of course without making them impenetrable. Further, Ryan argues that spatio-temporal immersion can "transport the reader onto the scene" (p.130). Ryan presents a number of strategies which can be employed to accomplish this transportation, examples of which are the use of adverbial deictic shifts (p.134-135), present tense (p.135-137) and 2nd person narration (p.137-139). The key to the success of these strategies is that they represent deviations from the norm and are perceived as something extraordinary by the reader (p.139).

### ***Intimacy in content and style***

According to Lombard and Ditton (1997, 4), one of the major cornerstones on which the sense of presence relies is intimacy. When comparing narration in weblogs with that of e.g. web pages, one striking difference is the personal tone often employed in weblogs. Both content and style are often affected by this personal approach. On the content level, many bloggers for instance report on their daily whereabouts, or reveal personal opinions/reflections. Some even include images of family and pets, and allow readers to get to know them privately. Style related issues concern e.g. subjective camera shots (Lombard and Ditton 1997, 14) in multi-media weblogs, and first-person narration. As stated above, however, Ryan argues that a way of involving your readers in the text is by occasionally addressing them directly through second-person narration. This would imply that a use of first-person narration as standard, with less frequent second-person addressing should make it possible for readers to feel intimate with the author, and thus to experience presence.

### ***Involvement***

Psychological states of the participants also affect presence. One such factor is involvement, which depends on the relationship between the participants and the content of the weblog. If the participant is interested in, or has previous knowledge about the topic discussed he/she

is likely to feel involved. Similarly, according to Ryan (2001, 128), one strategy to make readers feel involved is by referring to geographical place names that the readers recognize through previous visits or through the concepts that they represent. In her view, if the reader has previous knowledge of the physical place which is being described, he/she is more likely to be able to feel transported to the virtual representation of that place. It could be argued that the same is true for other subject matters: the more you know/want to know about a certain topic, the more involved you will feel when accessing this information.

Martin Dodge and Rob Kitchin (2001, 14-15) conclude that virtual space and physical space are closely related, and that information is geographically bound, despite the so called global village of the internet. This is in line with our case study findings. Most visitors to the Jokkmokk weblog came from the Jokkmokk area/northern Sweden, contrarily to our initial expectations.

### ***Individual user preferences***

The sense of presence you experience is closely related to your familiarity with the medium. Research from virtual reality, summarized by Lombard and Ditton (1997, 21-22) suggests that the sense of presence you experience can be divided into three stages. Beginners often experience a lower sense of presence than more experienced users, since they have to concentrate on the functions of the medium. In the second stage they learn to overlook the medium, and are able to feel more immersed. The third stage offers two different scenarios: either the sense of presence is enhanced, because the user is used to the virtual space and can more easily feel immersed into it, or the sense of presence decreases, because of the "habituation effect", which implies that users at first are impressed by the medium, but that this fades as users get acquainted with it. Even though these results are from virtual reality research, we argue that they also seem tenable in the case of immersive weblogs.

### ***Causes of co-presence in weblogs***

The two main causes of co-presence that are in focus here are *interaction with other users* and *immediacy*. The other four 'I's' will also influence co-presence, but since this is very similar to the ways in which they influence presence, we refer the reader back to the previous section.

#### ***Interaction with other users***

Some researchers argue that the mere knowledge that someone else is visiting the virtual space when you are there helps enhance the sense of presence. Examples of this can be found in the works of Tina L. Taylor (2002, 42) who claims that at least in an initial state of interaction this indication of shared space is enough to experience presence, and Steve Benford et.al. (1995, 6) who argue that presence is about indicating availability for interaction. Currently many weblogs do not contain built-in functions that indicate shared space. However, the tracker you find in many weblogs can serve as an asynchronous version of this feature. Another way of indicating presence to the author is by using the Instant Gratification plug-in, which automatically sends an IM to the creator of the weblog when it is visited. There are other plug-ins available that can be used for this purpose, one example being MeetingPage which we used in the Jokkmokk blog (see the *Immediacy* section below). This is one of the areas in weblogging which, in our view, needs further development in order for weblog interaction to become a more sociable experience.

Even more powerful than the indication of a shared space is, of course, the possibility to communicate with others. Lombard and Ditton (1997, 19) note that the number of people with which the medium allows for you to interact may affect the sense of presence you experience. They even hypothesize that the more people you interact with the greater the

sense of co-presence will be. In the traditional weblog the social interaction takes place via comments and track-backs, and the number of people with which you may interact is unlimited.

### ***Immediacy***

Co-presence is also dependant on immediacy (see e.g. Lombard and Ditton 1997, 4). Here, two levels of immediacy can be identified, concerning non-mediation in communication and time-span respectively.

Non-mediation in communication is quite difficult to accomplish with the weblog medium. Research has shown that different communication channels allow for different degrees of presence. For instance, Becker and Mark (2003, 29) expect that "the greater the ability to communicate a range of non-verbal cues in a virtual environment, the stronger the sense of social presence that would be created." Despite possibilities to type smilies or emotes as substitutes for paralinguistic cues, text-based communication does not allow for non-verbal communication. Audio communication is much more efficient here. Even though you cannot see the other person, you are able to draw conclusions about, for instance, his/her mood from the tone of the voice.

Synchronicity in communication will also help enhance the feeling of sharing a space with others. In traditional weblogs, the interaction is in the majority of cases completely asynchronous. Event weblogs, however, may allow for a somewhat different scenario. Here, the constant updates and the high level of attention on behalf of the participants may cause interaction to become close to immediate.

If one strives to create a high sense of co-presence through effective communication it is possible to solve this by implementing certain plug-ins. In the Jokkmokk project we used one developed by DigitalSpace in California, called MeetingPage. Here you can chat synchronously and communicate via voice. The fact that you enter MeetingPage via the weblog adds a sense of co-presence to the weblog itself. We believe that if we want to enhance co-presence in weblogs, these features need to be optimized.

### **Moblogging Jokkmokk 2004 as an example of a weblog with a high level of Weblog Presence**

The multilayered narrative of the Jokkmokk weblog is an example of how a weblog can be used to increase the sense of Weblog Presence. In fact, all of the first four 'I's' can be found in the Jokkmokk weblog. It is more difficult to draw any conclusions about the last two 'I's', *involvement* and *individual user preferences*, since no interviews with participants were carried out. The visitors of the Jokkmokk weblog were able to interact both with the medium and with other participants. The fact that parallel stories were told in the weblog made it possible for participants to navigate through the material in a more interactive way than normal. Apart from the chronological navigation provided in the default setting, the different ways to navigate through the material included both daily and personal archives. High sensory input, through color images as well as audio and video posts, and attempts at direct mobile reporting allowed for a high level of immediacy, as did the implementation of a synchronous chat space with presence indicator that even allowed for voice communication. Lively and personal reports and reflections made textual immersion possible and it is hypothesized that these reports, together with the multi-media content, created a sense of intimacy.

### **Weblog Presence revisited**

In this section, one way of approaching the weblog as a space has been presented, through the introduction of the concept of Weblog Presence. What distinguishes Weblog Presence

from the type of presence you can experience when visiting a traditional website is that apart from being immersed onto the scene you are also able to experience co-presence. Thus, the social and communicative aspects of weblogs combined with immersive media characteristics, are contributing factors to this deeper sense of presence.

It should be noted that certain aspects of the model presented here, such as immediacy (direct and live reporting and communication) may also compete with other important notions in weblogs such as reflection. While in Jokkmokk, we often found ourselves struggling to be reflective in spite of the demand for quick updates. However, we argue that a combination between immersive and involving reflections in text and less reflective, but more immediate multi-medial reports can complement each other in an efficient way to create a sense of presence.

Another issue is whether different types of interpersonal communication are competing with each other. It might be argued that the implementation of a synchronous chat would lead to a decrease in the number of comments. In fact, the relatively small number of comments that we received in the Jokkmokk weblog may well be a result of this. Nevertheless, we believe that it was through the synchronous chat that readers of the weblog developed relationships, and thus were able to experience a stronger sense of co-presence. Furthermore, we hypothesize that different modes will be used for different types of communication. Immediate reflections, questions and feed-back can be delivered in the synchronous, non-permanent mode, whereas points you want to make more permanent can be posted in the asynchronous comments/trackbacks. Thus, the different modes of communication rather complement each other than compete.

As previously stated, we believe Weblog Presence is most easily achieved in event weblogs, which infers that most weblogs today do not display the characteristics discussed in the model. The next section of this paper explores how presence can be created in general weblogs through the analysis of how language upholds and defines communication.

### **Part III: The Conversation: Coherence in a Dispersive Medium**

While computer mediated communication has been a source for linguistic study for some time (DeWitt, 1996), the study of electronic discourse within dispersive electronic environments is a relatively new field of investigation. Language in virtual environments is rapidly changing. Users are employing a variety of linguistic and pictorial techniques in an attempt to replace face to face interaction (Crystal, 2001). Language found in weblogs, however, must incorporate issues of electronic discourse with issues related to the specific, distributed format of weblog conversational networks. Weblogs are a unique example of online discourse as they are simultaneously self-reflecting journals and open-ended invitations for conversation. They are distinctive from static webpages in that they not only allow for the existence and maintenance of virtual communities, they promote them. Likewise, discourse within weblogs is different from that found in discussion forums due to the differences in hierarchical conventions. In a discussion forum, discourse follows a somewhat logical non-distributed, hierarchical structure with responses located below the initial utterance in a shared web space. Weblogs, however, share no contrived physical/virtual space. Discourse can occur in a variety of locations; within different weblogs, comment templates, on group weblogs, etc. This discourse can be traced in many ways, such as through the use of search strings, TrackBacking, referral logs, and comments. Weblog discourse can, conversely, be nearly impossible to trace, especially if a weblogger decides to refer to a certain post without any reference or linked referral to the original author or weblog. This is commented on by Philip D. Long (2004), "The initial purpose of the TrackBack protocol was to provide a way of aggregating posts by various webloggers about a particular topic. It addressed the problem that while a proliferation of weblogs gives voice to

many, it distributes the conversation such that it becomes next to impossible to follow the idea as expressed across these many weblogs.”

The distributed nature of this discourse, as well as the spontaneous, revisable, and interactive nature of weblogging, predictably lends itself to a complex coherence structure. Webloggers have adapted to this structure and consciously attempt to ease confusion by using hyperlinks to create a third mental space in which the reader can construct his or her own meaning based on given linguistic cues. Beyond the conscious level of linguistic misrepresentation, however, lies a plethora of unconscious phenomena that define the way language is being used in weblog space. The theory of conceptual blending (Turner, 2002), as well as the theory of mental spaces (Fauconnier, 1994) allows the researcher a window into the thought process behind language choice in this distributed, virtual medium. This portion of the paper will attempt to go beyond the simple hyperlink and exemplify the subconscious choices a weblogger makes when conversing.

### **Blending and Space: The building blocks of dispersive presence.**

It has been argued earlier in this paper that both event weblogs and general weblogs create a sense of presence in two ways: through the interaction between the user and the media content, as well as interaction between the user and other users. It is this second type of interaction that we will be the focus of the remainder of the paper. This type of interaction is based on the theory of cognitive blending, “Conceptual blending has a fascinating dynamics and a crucial role in how we think and live. It operates largely behind the scenes. Almost invisibly to consciousness, it choreographs vast networks of conceptual meaning, yielding cognitive products, which, at the conscious level, appear simple. Blending is governed by uniform structural and dynamic principles and by optimality constraints” (Turner). Through cognitive blending, users are able to cognitively create a space where dispersive dialogue can occur. This dialogue is not immediate or synchronous but, due to the use of blending, does create a sense of user presence within a seemingly *active* conversation. This portion of the paper will define cognitive blending and exemplify the theory on a micro level, using a thread of conversation from comments on the Jokkmokk blog. Further, we will attempt to break down the blend using Fauconnier’s theory of Mental Spaces in order to make explicit how weblog conversations remain both coherent and topical within a dispersive environment.

### **Cognitive Blending**

*People pretend, imitate, lie, fantasize, deceive, delude, consider alternatives, simulate, make models, and propose hypotheses. Our species has an extraordinary ability to operate mentally on the unreal, and this ability depends on our capacity for advanced conceptual integration (Turner, 217).*

Conceptual blending is the largely subconscious way that the human brain makes meaning. It takes information from two or more input spaces in order to create a blended space in which meaning is made unambiguous. There are three themes inherent to cognitive blending: *identity, integration, and imagination*. It is these three principles that are also the building blocks for dispersive weblogging presence.

#### ***Identity***

According to Turner and Fauconnier (2002:6), identity is often taken for granted. Identity is, in fact, a finished process stemming from a complex subconscious cognitive process. Recognition of identity, in its conscious state, is a product of this, not a beginning stage of cognition.

For example, according to Fauconnier's Identification principle, if two objects are linked by a pragmatic function, then a description of one could be used in the identification of the other. This is relevant when considering how dispersive weblogging conversations can be. In order to maintain a logical thread of conversation, a certain level of background knowledge, as well as an accepted level of agreement between terms is necessary. This process is largely subconscious. A comparison could be made to the conscious decision of hyperlinking for clarity or additional information, rather than explaining every concept or point in one's post.

### ***Integration***

Turner and Fauconnier also maintain (2002:6) that recognizing identity and its oppositions is also largely unconscious. In analogy, for example, phrases may not share identical terms, but we can recognize that they share the same form. This recognition comes from the identification and analysis of many different cognitive levels integrated into a blended cognitive space.

### ***Imagination***

Imagination describes, according to Turner and Fauconnier (2002:15) the "imaginative operations of meaning construction that work at lightning speed, below the horizon of consciousness, and leave few formal traces of their complex dynamics". This imagination is necessary in the construction of meaning as it allows for background knowledge to be accessed by both the writer and reader.

It was not difficult to illustrate a feeling of presence within both event and general weblogs. Neither was it very problematic to show that a sense of co-presence existed within the event weblog, Jokkmokk 2004. Problems began to arise, however, when we tried to show that there existed a sense of co-presence in general weblogs. The problem arose with the co-presence demand of *direct and synchronous communication*. It can not be argued that weblogging conversation is neither direct nor synchronous due to its dispersive nature. We began looking at the attributes for this type of interaction. We first needed to show that weblogs do, in fact, support dispersive conversations. These conversations are, unfortunately, prone to linguistic anomalies such as loss of coherence and blending of topics over time. We also needed to show that the participants of these conversations shared a common cognitive space in which dialogue could occur.

## **Topic and Coherence**

Currently, weblogs cover every conceivable topic and display a large qualitative variety. Similarly, many weblogging programs have begun to use social networking plug-ins which allow users to comment on specific entries, as well as to follow threads of conversation throughout the different weblogging communities. This networking occurs mainly in two different areas: the entry specific commenting area, and the entry specific TrackBack area. In order to examine how conversation occurs and is maintained, a brief introduction to the linguistic notions of topic and coherence is necessary.

### ***What is topic?***

According to Brown and Yule (1985:69), "The data studied is always a fragment of discourse and the discourse analyst always has to decide where the fragment begins and ends". This decision making process leads the analyst to examine the notion of topic. Topic within weblogs is not very difficult to define. The highly structured posting area is defined by subject headings and permanent links (the hyperlink that defines an entry's permanent place within the archive). When conversations stay within a weblog, the topic is defined within the entry and the entry-specific comment area. Topic begins to become more difficult to identify when it breaks away from the specific weblog and is discussed among many weblogs, both in their main posting areas and within each post's specific comment area.

### **What is coherence?**

Coherence is based upon the reader's interpretation of the writers intended meaning. For every utterance, there is a give and take of socio-cultural knowledge. This knowledge is not clearly stated in the original utterance; however, people from the same socio-cultural background often do not have a difficult time making meaning from the discourse. Issues of coherence are compounded in weblogging space as readers do not necessarily originate from the same socio-cultural background. While readers often do flock around common interests, the nature of the Internet allows these participants to come from every corner of the world. This is especially true of academics that share information through weblogs. These academics are often scattered around the world, and communicate through comments and close reading of each others weblogs.

### **The Third Space**

Due to the ease of misrepresentation in dispersed virtual space, weblogs are generating novel ways of dealing with issues of coherence. For example, it has become necessary and common place to italicize updates at the bottom of a post in order to resolve misconstructions. Webloggers also use the hyperlink as a form of metonymy. These links act as a third mental space in which readers are able to construct their own meaning.

The Jokkmokk weblog had many attributes that both helped and hindered coherence. The function of the embedded element, MeetingPage, is not commonly found in textually based weblogs. While this instant conversation added to the sense of presence in the weblog through a synchronous dialogue, the dispersive nature of the average weblogging conversation would be diminished. As previously stated, the multi-author dimension, combined with coverage of a multitude of 'mini-events' led to a choppy story line, not unlike a general weblog which covers many topics over a longer span of time. Another difference between the Jokkmokk weblog and a general weblog is the use of reference. We anticipated that the majority of readers would not be familiar with the subject matter. With this in mind, we were very thorough in our descriptions. In the average weblog, the weblogger tends to refer back to posts written by him- or herself. This reference is often accomplished by hyperlinks. Reference, however, is not always conscious. As regular users of written language, webloggers subconsciously refer to past knowledge. Using mental space theory, and ultimately cognitive blending, one can make a 'map' of the thought process used by both the reader and the writer in order to make concrete abstract processes found in dispersive discourse environments.

A mental space is a construct that contains elements and relations which are held together by connectors (space builders) that allow for the development of new elements and new relations. Mental spaces develop as discourse develops. "A language expression...does not have meaning in itself; rather, it has meaning potential, and is only within a complete discourse and in context that meaning will actually be produced" (Fauconnier, 37). Grammatical constructions alone are not enough to make meaning. For example on a post asking for suggestions for the next days' event coverage, the weblogger made a simple list of events available. One event was simply, reindeer racing. This is a phenomenon which is very foreign to large parts of the world, including a large percentage of the weblogs readership, (Jokkmokk 2004, February 6<sup>th</sup>, 2004, <http://blog.humlab.umu.se/jokkmokk2004/archives/000244.html>). This confusion was commented on by one reader:

*...what do they do? why would the reindeer have any interest in competing? how could you measure this? and how do they get them all to run in the same direction? is someone riding them? are there whips or carrots involved? how can i bet on which one wins? i think that many photos must be gathered to help dumb americans like me to learn whats up over there!* (pighed, February 6, 2004. <http://blog.humlab.umu.se/jokkmokk2004/archives/000244.html>)

### *Why would [the] reindeer have any interest in competing?*

The definite article, *the*, creates a space builder (Base space A) which contains the element, *reindeer*. Space builders are grammatical expressions which open a new space or shift attention to an existing space (Fauconnier, 1997). Within this space, noun phrases can either establish new elements, or point to existing ones. Verbs often work as trans-spatial operators which are crucial in mapping one domain to another. The remainder of the comment builds counterfactual spaces in which the reindeer continue to compete, but in a variety of different ways, such as with a rider or with a bet placed on the race. These counterfactual spaces create a third space, the mental space, where different scenarios are mentally tested as if they actually occurred.

Mental spaces are necessary on a subconscious level in order to have the *background* information needed to follow a piece of discourse as it unfolds. This is especially true when the discourse unfolds in dispersive mediums such as weblogs. This necessity becomes apparent when Hasse, another commenter on the February 6<sup>th</sup> post, answers pighead's question:

*"I think it's because they are scared and just want to get away from the place... they are held by people until the start, and they leave in the same direction, most of the time with a person sitting or standing on a sled behind the reindeer. Then anything can happen – as the reindeer is a flock animal they usually follow each other around the track..."* (Hasse, February 6, 2004. <http://blog.humlab.umu.se/jokkmokk2004/archives/000244.html> )

Hasse's comment builds on the base space of reindeer running in a race (Base space A) by blending it with Counterfactual space R (to run) and RI (to ride), getting the reindeer to run in the same direction and with or without a rider. He adds attributes to this blended space such as fear, anticipation and flock behavior which, in turn, creates a space where the attributes of both spaces R (to run) and RI (to ride) are true.

This section of the paper has illustrated on a micro level how language is subconsciously used to create background knowledge needed for coherent conversation. The same structures are used to maintain coherence on a large, multi-weblog scale. These mental spaces are employed by both the writer and responder in order to keep track of a conversation spread over many physical/virtual spaces.

## **Conclusions**

In this paper, we have discussed the role of presence in weblogs. Drawing on previous research on presence and our own experiences from participating in the project Moblogging Jokkmokk 2004, we started out by presenting the potential causes of presence in weblogs through the model of Weblog Presence consisting of six 'I's': *Immersion, Intimacy, Immediacy, Interaction, Involvement* and *Individual user preferences*. Weblog Presence combines immersive media (presence) and social interaction and communication (co-presence), something which is possible due to the characteristics of the weblog medium.

Even though some traditional weblogs do exhibit immersive and immediate characteristics, there is commonly a big difference between event weblogs and general weblogs in this respect. Whereas event weblogs to a great extent rely on immediacy; through the use of live reporting, sensory stimuli and synchronous communication, general weblogs are more reflective and communication is asynchronous. Another important difference lies within the fact that the event weblog is closely related to a physical place, and as such becomes a virtual representation of that place. In event weblogs, conversations often remain within the weblog itself, whereas general weblog conversations are dispersive and often spread outside

the weblog of origin. This led us to conclude that event weblogs and general weblogs often evoke very different senses of presence.

In order to define the type of presence that users of general weblogs can experience, we made use of Fauconnier and Turner's theories of Mental Spaces and Cognitive Blending. These theories are able to linguistically define structures, largely subconscious, that humans employ in order to maintain coherent communication. These structures are the bases of cognitively construed spaces in which dispersive communication can exist and develop. As bloggers use a variety of methods to communicate and converse (trackbacks, comment features, posts, reciprocal posting), conversations tend to spread over both distance and time. Without the development of mental spaces, coherent conversation would be difficult, at best.

In our view it is important to consider issues to do with presence in weblogs, since weblogs that allow for a high level of presence will most likely succeed in creating a lively and sociable experience, and a sense of a shared space. One way of truly taking advantage of the benefits of the weblog medium would be by optimizing interaction both with the medium, with the content and with other users. With this in mind, we see great potential in enhancing the possibilities for social interaction in weblogs. Considering that this is an advantage of weblogs over e.g. web pages, it is important to focus on this aspect. Such improvements would also enhance the sense of Weblog Presence in every type of weblog.

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INSTANT GRATIFICATION: impossible.com: <http://www.impossible.com/blogtraffic.html> (13/08/04)

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