# Interaction in Virtual Learning Environments (VLEs) – an Ethical Perspective

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#### **ABSTRACT**

This paper attempts to contribute to a deeper insight into the ways in which we are challenged in communicative and collaborative situations in virtual learning environments (VLEs). In particular the focus is on communication in asynchronous environments, more specific discussion boards. By introducing the concepts of surveillance, trust, risk and spontaneity, it is explained how the precondition for being able to establish learning processes fundamentally depends on the degree to which we are in a position to create space for trustful collaboration. It is argued that collaboration build on trustful relations is communication enacted through engaged commitment, where strategic deliberations has been put aside. It is exemplified how this might be obtained or suppressed in VLEs, partly through a discussion of virtual presence but also by questioning the traditional use and role of metaphors in design.

#### **Keywords**

Surveillance trust, risk, spontaneity, engaged commitment, presence, knowledge creating metaphors

## INTRODUCTION

Technological environments are not to be viewed in separate as containers that encapsulate human activity. In adapting to a virtual learning environment (VLE) people are both subject to influence from the technology and at the same time they reconstruct technology. From this general vantage point, my paper discusses ethical issues in areas involving computer-mediated collaboration.

It is held that differences between F2F and virtual interaction form a continuum, where basically the same kind of risk and trust is at stake whether learners surrender themselves in the physical class room or on a course discussion board. Still, risk and trust unfold their roles with different consequences in virtual settings, since a technological framework is supportive of mechanisms of surveillance in an inescapable and ever lasting perspective. The fact that learners interact in an asynchronous and disembodied environment gives rise to a relatively high degree of unpredictability in VLE interaction. As pointed out by Fontaine (2002), our being present in VLEs almost reach the level of alertness, whereas physical embodiment and the familiarity with F2F synchronous interaction does not require us to pay much attention to rules of communication, and this allows for a more spontaneous interaction to unfold in real life settings. In this manner, the notion of spontaneity is a basic prerequisite in the explanation of the conditions for virtual interaction. Spontaneity plays an important role, both in connection with the learners awareness of the everlastingness of their utterances, but also, due to the fact that in articulating an identity, coping with VLEs requires meta communicative efforts similar to the kind of efforts we experience in real life settings when engaged in understanding the norms of a different culture (Fontaine, 2002).

Through an ethically based analysis of the above mentioned concepts, it is the purpose of this paper to highlight significant features regarding interaction on discussion boards in order to inform the design of VLEs. Furthermore, it is illustrated how the present use of metaphor in design tends to standardize virtual interaction. In taking these steps, I am not arguing in favor of our sketching out ethical instructions for design. Instead, this article might be viewed as another brick in the ongoing construction of a broader understanding of how learning and identity unfold in VLEs. It is of course not desirable to grow a techno-phobia, but this should not prevent us from discussing how technology changes ways of learning and social relations. Making the "taking for granted" or familiar aspects of technology unfamiliar enables us to highlight components of online learning which otherwise risk becoming negligible. Thereby we are able to explore how we can ensure the best conditions for learning and communication which enables individuals to submit themselves in collaborative computer mediated contexts.

## **SURVEILLANCE**

When surrendering your self to the learners role in networked learning environments, what often happens is that, despite the best of intentions, people find to their cost that in reality the learning processes that are mediated through online communication, virtual class rooms and discussion boards to a certain degree subject their surroundings to standardization, self monitoring and surveillance. As pointed out by Wenger (Wenger 1998, p. 233) practice always constitutes a response to design, and unexpected adoptions of design might negatively affect a learning environment.

With reference to the concepts of *panopticon* and the *examined citizen*, Foucault gives a cultural analytical powerful explanation of the significance and mechanisms of surveillance (Foucault, 1979) in where he stresses that the development of disciplinary control practices for the measurement and improvement of citizens historically takes places simultaneously with the invention of (pan)optical instruments and techniques that operate in secret and unnoticed can register everything. With a feel for analogical connections, he furthermore points to Jeremy Bentham's plan of the ideal modern institution, which Bentham very appropriately named *Panopticon*. What we have here is an architectural pendant to the control practices which reflect the essence of those power mechanisms, often concealed, which come into play in relation to society's surveillance and disciplining of the examined citizen. With the *panopticon* inspired construction the constant presence of the consciousness of being observed will mean that the individual internalizes the consciousness of surveillance so that surveillance itself no longer actually needs to take place – the individual takes up of his own volition an appropriate form of behavior to meet the control (Foucault, 1979, p. 203).

In a similar way, when technology affords moves towards self- and group- surveillance, identity moves towards being a question of how you are able to *re*present yourself in the learning system.

From a different angle, but still focusing on the exploration of social relationships, Wenger suggests that our being in the world basically rests on our participation in communities of practice where we are engaged in ongoing processes of meaning construction in building up an understanding of the surroundings. This negotiation of meaning takes place in a dualistic process of participation and reification, where last mentioned scaffolds and organizes a framework for further knowledge construction. Every community of practice rests on reified products, in the form of different representations of practice, which have been transformed into procedures, different types of abstractions and tools, which all together allow for participation and suitable navigation in practice. But, if the balance between reification and participation tips over in favor of reification, it causes the development of an instrumental practice (Wenger, 1998, p. 65). The ethical dimension regarding the role of reification in online communication concerns the fact that everybody is able to keep record of their own and others performances. This might cause viewing the potentials for knowledge building by means of reified objects in a way, which does not promote trustful collaboration.

Here, what you might call deliberated self surrender might be a suitable way to respond to a design that offers you an opportunity to communicate and present you self after always having reflected upon how to stage your communication and the picture you present to the surroundings. Such mechanisms of communication in groups are of course well known from face-to-face learning situations, as well as from interpersonal behavior in general. This is reflected in Goffman's notion of "face-work" as used in his characterization of social behavior in terms of a drama where we play different roles in different social settings. As social beings, we are constantly involved in many different dramas, and changing "face", costumes and roles in a balanced accordance with our own understanding of ourselves and the expectations of the surroundings (Goffman, 1959). Nevertheless, in F2F interaction learners most often participate in the negotiation of meaning through communication that are not reified, whereas online communication, as mentioned, is always subject to reification, and forever after accessible in logs allowing learners to keep track of their own and others reflective style. In the positive sense, logs give rise to meta-reflections regarding learning processes, but at the same time logs allow for surveillance both between learners as well as between learners and tutor. Moreover, the tutor traditionally possesses a role which reflects an asymmetric relation of power between being a facilitator of communication and at the same time representing a formal authority with a duty to evaluate the performance of the learners. This rather distressing fact is given voice below by comments coming from undergraduate students in Information Science at University of Southern Denmark:

"When it comes to surveillance. ..The kind of feed back that the tutor gives on class outside the discussion board in referring back to what has been written on the discussion board earlier, also affects the way one formulates one's thoughts in the discussion board."

"There is one participant who is going to grade you, the tutor. The fact that you know the tutor is going to evaluate you has an effect."

This tutor role-paradox is further reinforced in a computer mediated setting, due to the access to a structured arrangement of the learners' utterances in logs. In most virtual learning environments there are sophisticated surveillance tools available for tracking and for keeping records of student activity. It thereby becomes possible to collect detailed patterns of information and to obtain an insight into the individual student's habits (Land and Bayne 2005, p. 165-66). This might gradually push the role of teaching towards one of learning management instead of one of facilitating communication. These circumstances might promote a competitive setting on behalf of a collaborative setting, and thereby negatively influence the ethos of teaching.

To sum up, fundamental similarities in the unfolding of communicative activities can be found in both contexts of F2F and virtual interaction, but the realisation hereof is played out differently, and with different consequences for the learner in virtual contexts. This is clearly expressed by Land (2005, p. 155-157) in a discussion of the phenomenological position of Dreyfus and his observations in relation to online learning's limitations. Here Land mentions how Dreyfus sees the impact of embodiment and our sense of reality and trust in other people as a prerequisite for learning to take place. According to Dreyfus, due to the absence of embodiment, online learning is seen as limited and therefore characterized as a space for risk free pseudo involvement. Only in F2F interaction, physical presence provides for learning to take place, since we are aware of the other and the risk we face in interacting in a real life setting where our actions have real consequences. In this sense, there is unconditional commitment at stake in F2F relations - as for instance when a professor confronts the student up front in the class room. In order to reach the level of expertise one must meet the challenges of real life coming from making choices that, when wrong, have real consequences - Therefore, Dreyfus sums up, online learning is like a simulator, unable to reflect the risks of real life involvement. In Criticizing the position of Dreyfus, Land correctly points to the fact that VLEs are not risk free spaces, and learners are indeed faced with the risk of laying forward their ideas in being conscious that their contribution is accessibly for a proper period of time - "unlike the ephemeral and evanescent tutorial remark that is likely to be forgotten and beyond recall even before the students leave the room" (Land, 2005, p. 157).

#### TRUST AND SPONTANEITY

Within the field of social science and from a cultural approach, the concept of trust has been discussed by Giddens in a Foucauldian approach (Foucault, 1979), in where Giddens discusses the use of surveillance and information to coordinate social activities (Giddens, 1991). The more basic communicative aspect of trust, as reflected in moral philosophy by Løgstrup (1997), highlights the fact that: "Regardless of how varied the communication between persons may be, it always involves the risk of one person daring to lay him or herself open to the other in the hope of a response. This is the essence of communication and it is the fundamental phenomenon of ethical life." (Løgstrup, 1997, p. 17).

Taken in this sense, trust is a fundamental phenomenon of ethical life. In what follows, the concept of trust and spontaneity, as discussed in moral philosophy by Løgstrup (1997), will be used to qualify an analysis of collaborative and communicative relations in VLEs. Through a discussion of the concept of trust, Løgstrup illustrates the mutual dependency between people, while at the same time pointing out that the other's self-surrender to me equally demands that I am always unilaterally under obligation to the person I meet. It is only I who can determine whether I will accept or reject the other, or, as Løgstrup expresses it: "A person never has something to do with another person without also having some degree of control over him or her." (Løgstrup, 1996, p. 25). It is, then, not a question of the ethics of trust in a sentimental sense. The ethical demand made of the other is not a matter of care but represents a fundamental precondition of being human consisting of self-surrender. The importance of avoiding sentimentalizing the concept of trust cannot be exaggerated. In this respect trust must be regarded as fundamental to such an extent that we would not be able to exist if co-existence were not supported by this fundamental mechanism of trust. All human co-existence rests, then, on a primary assumption of trust, or rather self-surrender. This is made even more evident by the fact that we are most often surprised and demand an explanation, if we are met with rejection and mistrust - distrust is so to speak the deficient form of trust.

It is, however, also the case that we would be in an unbearably extreme position if we had not equipped ourselves with norms, which could protect us from direct confrontation with the ethical demand to take care of the life of the other. Even though co-existence rests on a basic assumption of trust, we surrender our existence by showing each other a conditional trust, which spares us from unbearable exposure. We are forced, so to speak, to trivialise the basic prerequisite of life which I have spoken of by giving it a form which makes existence bearable and practicable. Existence is given shape, then, by the conventional norms with which we surround ourselves in order to preserve a smooth and functional co-existence -"Without the protection of the conventional norms, association with other people would be unbearable" (Løgstrup, 1997, p. 19). In that context the norms are wedged in like a neutralizing instrument, which provides a space for action in which we

do not need to relate to the fundamental, radical alternatives of human existence every time we come into contact with one another. That which is not unconditional care for the other's life is destruction thereof. Løgstrup notes that it is the child who does not manage to bear the comfortable mantle of convention, but encounters the world with trust and without reservations -"The child, being yet outside of convention, still stands in the power of the given alternative. If he or she fails to encounter love, his or her future possibilities are destroyed – as psychology and psychiatry have amply shown." (Løgstrup, 1997, p. 20).

In VLEs, norms of interaction are still up for negotiation among learners, therefore efforts going into the articulation of a proper net identity with the purpose of minimizing risk and exposure, might overshadow engaged involvement in online collaboration. If this is the case, learners end up participating in standard collaboration, without back up in the form of communication, which, through engagement, commits the learners to nurture the dialogue in order to support the ongoing collaborative process. The unpredictability and the disquietude in online communication which sometimes turns learners into vulnerable children (all though with less dramatic effects than reported by Løgstrup), can to a certain degree be handled by introducing rules of communication and by assigning different roles to participants. But still, acting in VLEs requires a relative broad sense of awareness and self monitoring - "In strange lands, life and work are not so routine" (Fontaine, 2002., p. 32).

Acting engaged and with unconditional commitment in a given context is similar to being present and situated in that context. According to Løgstrup, the ethical demand can only be honoured spontaneously. As soon as we begin to think about whether we are really acting as we ought, the focus moves to ourselves and away from the essence: to act exclusively in relation to the other person. From an ideal perspective we do not act ethically in such situations and end up if the worst comes to the worst in self-justification and moralizing behaviour. Such a scenario could be the product of interaction in a VLE where all efforts are spent on monitoring own and others performance, and nobody really cares about or wants to take responsibility for the collaborative part of interaction. As mentioned above, this scenario can unfortunately be promoted by the element of surveillance present in VLEs. This point is further reflected in Heidegger's notion of "enframing" in referring to a technological kind of ordering, which causes us to experience everything as recourses in a system that is to be enhanced and controlled (Heidegger, 1993). Thereby, interaction is being colonized by a set up which provides for an instrumental approach to communication in where strategic communication rules out collaborative dialogue. In this perspective, the precondition for being able to establish productive learning processes fundamentally depends on the degree to which we are in a position to create space for trustful collaboration among learners.

It takes time to grow trustful relations in VLEs. Even though learners meet on a daily basis for on campus activities, and despite the fact that the dialogue during the on campus course is kept in an informal tone, they report how they feel insecure in connection to the discussion board where they are supposed to engage in all round discussions and even allowed to reflect on course topics from a broader and more free perspective than they can find time for during the course. But this is hard to obtain, some of the reasons why are reflected in the following quotations by undergraduate students in Information Science at University of Southern Denmark:

"One of the reasons for being more formal when one sits and write on a discussion board is...because, you know, if somebody disagrees then they will take whatever you have written and pull it apart in tiny pieces and put it together again and turn and twist it in every possible way...and if it is the case that I myself feel that what I have written has some weak points then I wonder, whether the post I have submitted will at all be seen as important, or whether I'm just going to face exposure because of the minor errors I have made...One considers much more what to write on the discussion board compared to what to say F2F on class."

".Mistakes in grammar...If you want to fire off a difficult concept and your spelling is wrong, then it's a total flop...I can be pretty hard on others, if they make mistakes..."

"Trust...One sits and wonder whether the spelling is right and whether the sentences are well formed. It's also because we don't know each other that well, besides how good we are at drinking beer. We don't know each others strong and weak sides."

"On the discussion board it is not possible to reach an agreement right away if one disagrees. But here on class one can easily say: let's agree on disagreeing and then move on. But it is much more difficult to express on discussion board if you have tread on somebody's corns than it is in real life. Here you just slap his back and go like: 'hey I didn't mean to tread that hard on you toes!' "

"I often joke in class...acting ironic and such. But I would never act like this on a discussion board. I'm afraid nobody would know when to take me serious. Absence of intonation, body language and sense of occasion really mean a lot on the discussion boards."

# PRESENCE AND THE ROLE OF METAPHORS IN DESIGNING FOR COLLABORATION

Collaboration build on trustful relations is communication enacted through engaged commitment allowing learners to be carried away, leaving as little as possible room for explicit strategic deliberations. In order to promote engagement and a sense of responsibility among learners towards keeping the collaborative process rolling, one must not only, as known in F2F interaction, allow for people to feel confident in coming forward with their opinions, it is also necessary to nurture presence in cyberspace, as pointed out by Fontaine (2002). He mentions the importance of growing a sense of virtual presence, where learners experience that they are really situated in the VLE, engaged in collaborative activities with other participants, and thereby they tend to forget the actual physical setting as well as the medium (Fontaine, p. 34, 2002). This kind of psychological virtual presence and commitment can be nurtured by creating a flow of different kinds of events, such as allowing for informal chats, having guests commenting on this or that, and encouraging a culture where students contribute with their own stories. By sustaining an environment in a state of flux it is possible to uphold a high degree of engaged participation.

"And these stop-the-world experiences cannot simply be scripted and reproduced from semester to semester. Doing so nearly always "shows" to the participants. Rather, the trick is for the instructor to maintain a high sense of presence while participating in the course as well so that the topics flow from real experience and are accommodated to needs stemming from the personalities, experiences, and culture of that particular class."

(Fontaine, p. 44, 2002)

Moreover, place making, by use of metaphors (e.g. "speakers corner", "lectures left-overs") can also be introduced to support a sense of presence. It is of course always a good idea to use metaphors in customizing and personalizing a discussion board framework in a course. But, as pointed out by Bayne, in considering system design in general, there is a problem in transporting metaphors from one domain to another if the dominating principle behind a design is based on an instrumental assumption where the internet is simply viewed as a faster way to distribute old familiar stuff (Bayne, 2005, p. 39).

In elaborating further on this point, one might also add that not only do metaphors have to be carefully chosen, since they always highlight certain characteristics on behalf of others, but what is more important, if we use metaphors only to transfer similarities or to make the unfamiliar familiar, we also reduce the possibilities for uncovering new ways of working in VLEs. If system design is boiled down to a question concerning how to recast pre-existing practice we loose insight into the unique nature of virtual learning cultures. By introducing the use of knowledge creating metaphors in the process of working out a didactic design for a VLE, we might open up towards a more creative outlook. The notion of knowledge creating metaphors emphasizes how juxtaposition of different objects or situations may provide for a new understanding of a domain to emerge, whereas similarity based metaphors only highlight features already dominant in the source domain in order to carry over a familiar understanding of the new environment. Within film the so called montage technique reflects the knowledge creating potential, as exemplified in the citation below:

"In Stanley Kubrick's classic film 2001: A Space Odyssey, the movement of a bone thrown in the air by Moonwatcher (an ape-man) is transformed into the movement of a space-ship in the twentyfirst century by means of a cut that may well be one of the most dramatic cuts in the history of films. Though the cut seems to have the character of an unobtrusive join, for the movement of the spaceship is closely matched with the movement of the bone, its effect, on the contrary, is quite shocking [..]. We realize that they are both expressions of human technological prowess [..]. Thus, the similarities that the juxtaposition of the bone and the spaceship evoke go far beyond whatever you may have come up with earlier."

(Indurkhya, 1992, p. 44)

The tensions that stem from a metaphorically supported reproduction of pre-existing practice into the digital sphere - with the narrow(minded) purpose of restoring an optimized and more effective version of that practice - implies viewing technology through an instrumental framework. Here a productive development of VLEs on their own terms is downplayed because transfer inspired metaphors provide for an interpretation of VLEs that favors quantitative characteristics, such as: How much information can we share? How often can we be in contact? How much can we store in a structured manner? How fast can we get access to logs? How smooth can

teaching material be distributed? The strong version of this approach towards design can be found in the business world of learning management systems. On the other side, focusing on qualitative characteristics by VLEs, implies dealing with issues regarding how to grow a culture that do not highlight the content delivery, information handling and management perspective towards learning, but rather promotes the facilitating and collaborative perspective. Here we can ask questions concerned with values in relation to communication and collaboration and continue the ongoing exploration of how the realisation hereof is played out in virtual contexts.

Through knowledge creating metaphors, we are able to work with design from a more creative perspective than the one obtained through an approach to metaphors that only sets out to decompose ideas in a pre-existing practice and transfer them to the a new practice still under cultivation in the virtual realm. The similarity based approach to metaphors is reflected in the quotation below:

"The greatest thing by far is to be a master of metaphor. It is the one thing that cannot be learnt from others; and it is also a sign of genius, since a good metaphor implies intuitive perception of the similarity in dissimilarities.

(Aristoteles, Poectics, 1993, 1459a)

If faced with something new, we are masters of metaphors if we intuitively can point to "similarities in dissimilarities". This is most easily done by looking at how the new world resembles the well known. But contrary to the Aristotelian similarity based stand point, the metaphor is not to be viewed as a tool for reducible comparisons between domains in a search for resemblances. Rather the impact of the knowledge creating metaphor can be conceptualized as an interaction between inseparable thoughts who work together in bringing forward a new understanding of the given area. The metaphor's knowledge creating potential is elaborated on by Black in his attempt to formulate ways in which metaphors bring about similarities, instead of simply relaying on existing similarities in making a metaphorical comparison by means of what is already present. Actually, he expressed his ideas by bringing in metaphors himself:

"Suppose I look at the night through a piece of heavily smoked glass on which certain lines have been left clear. Then I shall see only the stars that can be made to lie on the lines previously prepared upon the screen, and the stars I do see will be seen as organized by the screen's structure. We can think of a metaphor as such a screen (..)."

(Black, 1962, p. 41)

At first sight, the notion of a screen, acting like some sort of filter, intuitively represents an appealing explanation, but the image is problematic since a screen (as well as a filter) can only advance perspectives concerning already existing situations, but not create new perspectives. In this respect, the screen metaphor does not provide for a clarification of the knowledge creating potential in relation to metaphors. Black argues that the sky can form an infinite number of patterns and thereby the similarity organized by the filter can be looked upon as a created similarity. But a filter is only able to reveal what is already there, therefore this leaves us with no clear explanation of how the similarity is created, a similarity which might provide for new insights in a given area. If Black had known about Lego, he might have illustrated his ideas by introducing a Lego metaphor. In playing with Lego, the combining principle of the building blocks forms a structure, which we have to stick to – not anything goes in Lego. But if we follow the principles of construction, we are able to expand the framework of design. In the same manner, we follow certain rules of thumbs when we are engaged in creative processes in trying to comprehend the didactic power of a VLE. But, as opposed to the "screen" or "filter" idea, the manifold possibilities for combining building blocks can be viewed upon as illustrating ways in which our thoughts can interact in bringing forward a new productive interpretation of the virtual culture under scrutiny. In this manner, we might enable innovation in design strategies and move beyond the simplistic comparisons of elements and conditions from an existing practice.

In this article, I bring in metaphors to draw attention to the point that we should reflect carefully on how metaphors are used in general in connection with design strategies. It falls without the scope of this article to provide specific guidelines for reflecting with metaphors (this is discussed in a forthcoming paper), since here I am primarily concerned with how problems virtual interaction can be seen in relation to metaphors. For the time being, the ways metaphors are brought to play in design tend to support a standardization of virtual interaction which mirrors the instrumental framework these metaphors rest on. Here the major goal becomes using technology to speed up ways of working with the purpose of making learning smooth and effective. Instead, I suggest an introduction of a perspective towards metaphors that might enable us to generate new views on design.

## **CONCLUDING REMARKS**

Whether we are dealing with engaged or disengaged virtual activities, a large part of the outcome from activities on discussion boards consists of reified objects, which have been produced in a particular context within the scope of a specific purpose. Nevertheless, the individual learner leaves a print of thought that can be used in a variety of different contexts, by different recipients and for many different purposes. Therefore, trustful collaboration without strategic undertones is difficult to obtain on a discussion board, since learners might feel that they are subject to exposure. In the optimal sense this may well give rise to prepared well-digested posts, since nobody wants to loose face on the discussion board. But quite often dialogue activities do not take off.

"My guess is that at this point in our understanding of Teleland, identifying and maintaining that flow is much more an interpersonal art than a science or, perhaps, mostly good luck. We remember those courses in which the optimal levels were obtained, and we forget – and hopefully our students forgive us – the courses that fell short!"

(Fontaine, p. 45, 2002)

To overcome the challenge from the management and surveillance perspective towards online learning, I propose a shift in design approaches. From this outlook, the main purpose for bringing in metaphors has been to suggest that in exploring VLE design in general, we should not *predict* ways of learning by looking back on pre-existing practice and develop design that rests on metaphors from an instrumental framework. This will allow for a highlighting of quantitative features and afford questions such as: "How fast and smooth can we deliver teaching?" As an alternative, we should seek to *invent* new ways of learning by turning to a knowledge enabling use of metaphors in order to gain insight into the unique qualities of virtual learning cultures.

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