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ACCESS IN MIND : ENHANCING THE RELATIONSHIP TO CONTEMPORARY ART

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Abstract

The aim of this paper is to discuss methodological issues related to the study of young visitors' interaction with an audiovisual art guide in an art gallery. The goal of the study was to evaluate the visitors' experience of *Access in Mind*, an audiovisual installation, their conduct in the gallery space and their perception of the exhibition. Data were collected using video recordings and questionnaires. The study was conducted at the annual spring exhibition 2004 at a leading gallery for contemporary art in Stockholm.

The theoretical framework uses analytical notions both from the educational and the semiotic field within a socio-cultural perspective. The data were analysed using the categories: interest/disinterest, time spent at each piece of art, visual interaction, gesticulation, aesthetic judgements, mastery and appropriation. The key findings indicate that there was a difference between visitors who had used *Access in Mind* and visitors who had not, in regard to their conduct in the exhibition space, and their reflections of the gallery tour. The visitors who had used *Access in Mind* showed more signs of interest, spent more time in the gallery space and used more words related to aesthetic experience than did the visitors that had not experienced the installation.

From a perspective of socio cultural research we argue that *Access in Mind* works as a physical and cognitive tool for learning, which provides a visitor with new concepts that can enhance the experience of art. We argue that the aesthetic words used in the prototype were normative, and guided the visitors in defining their own experience, so that they could more easily relate to the art.

Keywords: Art education, Visitor studies, Interactive installations, Mixed reality

Zusammenfassung

Das Ziel dieses Vortrags besteht darin methodologische Probleme, die mit der Untersuchung über die Interaktion jugendlicher Museumsbesucher mit einem audiovisuellen Kunstführer verbunden sind, zu diskutieren. Ziel der Studie war die Erfahrungen der Besucher mit „Access in Mind“ („Zugänglichkeit und Bewusstsein“), einer audiovisuellen Installation, die für Museen und Kunsthallen konzipiert wurde, sowie ihr Verhalten im Ausstellungsraum und ihre Wahrnehmung der Ausstellung zu evaluieren. In einen speziellen Sessel wurde eine narrative Klanginstallation eingebaut. Die Erhebung der Daten erfolgte durch Videobeobachtung und mit Fragebögen.

Durchgeführt wurde die Untersuchung in der Liljevalchs Kunsthalle in Stockholm während der Frühlingsausstellung 2004.

Die Resultate der Untersuchung deuten darauf hin, dass zwischen jenen, die „Access in Mind“ genutzt haben und jenen, die es nicht genutzt haben ein Unterschied in ihrem Verhalten im Ausstellungsraum als auch bezüglich ihrer Reflexionen zur Ausstellungen besteht. Die Besucher, die „Access in Mind“ benutzt hatten, zeigten ein größeres Interesse, verbrachten mehr Zeit im Ausstellungsraum und gebrauchten mehr auf das ästhetische Erlebnis bezogene Wörter.

Die Ergebnisse lassen darauf schließen, dass „Access in Mind“ als fassbares und kognitives pädagogisches Werkzeug das Kunsterlebnis für die Besucher verbessern kann. Wir nehmen an, dass die in dem audio-visuellen Sessel verwendeten Ausdrücke als Richtlinien für die Beschreibung der eigenen Erlebnisse der Besucher funktionieren.

Schlüsselwörter: Kunsterziehung, Besucherstudien, interaktive Installationen, Mixed Reality

Résumé

Le propos de cet article est de discuter de questions méthodologiques relatives à l'étude de l'interaction des jeunes visiteurs avec un guide audiovisuel sur l'art dans une galerie. Le but de l'étude était d'évaluer l'usage par les visiteurs d'une installation audiovisuelle (*Access in Mind*), leur comportement dans l'espace d'exposition de la galerie, et leur vision de l'exposition. Les données ont été rassemblées en utilisant des enregistrements vidéos et des questionnaires. L'étude a été entreprise au printemps 2004 à l'exposition annuelle d'une galerie majeure pour l'art contemporain à Stockholm.

Le cadre théorique repose sur des notions analytiques des sciences de l'éducation et de la sémiotique dans une perspective socio-culturelle.

Les données ont été analysées en utilisant des catégories comme : intérêt/désintérêt, temps passé devant chaque oeuvre, interaction visuelle, gesticulation, jugements esthétiques, maîtrise et appropriation. Les résultats principaux montrent qu'il y avait une différence entre les visiteurs ayant utilisé *Access in Mind* et ceux qui ne l'avaient pas fait, au regard de leurs comportements dans l'espace d'exposition, et de leurs réflexions sur la visite. Les jeunes qui avaient utilisé *Access in Mind* ont montré plus de signes d'intérêt, ont passé plus de temps dans l'espace d'exposition, et ont utilisé plus de mots liés à une expérience esthétique que les visiteurs qui n'avaient pas eu recours à l'installation.

Dans une perspective de recherche socio-culturelle nous arguons du fait qu'*Access in Mind* fonctionne comme un outil physique et cognitif pour l'apprentissage, fournissant au visiteur de nouveaux concepts pour rendre plus riche son expérience de l'art. Nous arguons du fait que le lexique esthétique utilisé dans le prototype était normatif, et a guidé les visiteurs dans la définition de leurs propres émotions, les aidant à se sentir plus proches des oeuvres.

Mots-clés : Education artistique, Etude de visiteurs, Installations interactives, Réalité hybride (mixte)

I. Introduction

In today's post modern society, images play an increasingly important part of communication in books, newspapers, magazines, advertisements and digital media. A new kind of visual literacy has developed as a consequence of this, although not taught in schools. Young people learn how to read and interpret the visual culture through other means, by active participation in socio cultural contexts with others (Kress & van Leeuwen, 1996). Contemporary art is a part of this visual culture and, like other images, can be subject to a variety of possible interpretations. We argue that visitors learn how to interpret and give expression to their aesthetic experience by using both cognitive and physical tools for learning.

Aesthetic experience may be an obvious outcome for anyone visiting an art gallery, but when it comes to contemporary art, the answer tends to be the opposite. A lot of people, and especially young people under the age of 20, claim that contemporary art is not easily accessible, and that it is sometimes difficult to make any meaning from it at all. This situation has led to the development of the prototype *Access in Mind*.

II. What is Access in Mind?

Access in Mind is an audiovisual installation for the art galleries helping visitors to respond to works of contemporary art, rather than to explain their cultural importance, style or historical context.

The prototype has been developed 2002 at Visions for museums/ Interactive Institute in collaboration with The Swedish National Council for Cultural Affairs. Visions for museums is a R&D studio experimenting and evaluating the use of digital media in museums and similar informal learning environments. *Access in Mind* aims to stimulate and encourage young people to explore contemporary art using a multimodal approach – light/dramatized audio. The target group is young people between the ages of 13 and 18 years.

The design consists of a “ball-chair” equipped with speakers and 3D sound. The sound system also produces vibrations in the chair through a basic unit in the seat. Light is projected through a number of Plexiglas plates combined with diodes which randomly project different colours. The chair is covered with foamed polythene plastic, and is placed on a wooden podium.

Sitting in *Access in Mind*, the visitor hears three different voices with different approaches, reflecting on contemporary art. The voices represent three fictitious characters,

which are engaged in a kind of ongoing discussion based on their respective views. The first voice alludes to that of a learned or authoritarian speaker; in this case the artist or art connoisseur – the expert’s voice. The second voice is of a fictitious young man reflecting on love, loneliness, insecurity, suicide and everyday life. The third and last voice belongs to a young woman, a kind of conscience that appears behind the visitor’s neck and encourages the visitor to feel free to grasp without restraint; not to be afraid and to believe in their experience and judgement (fig. 1).

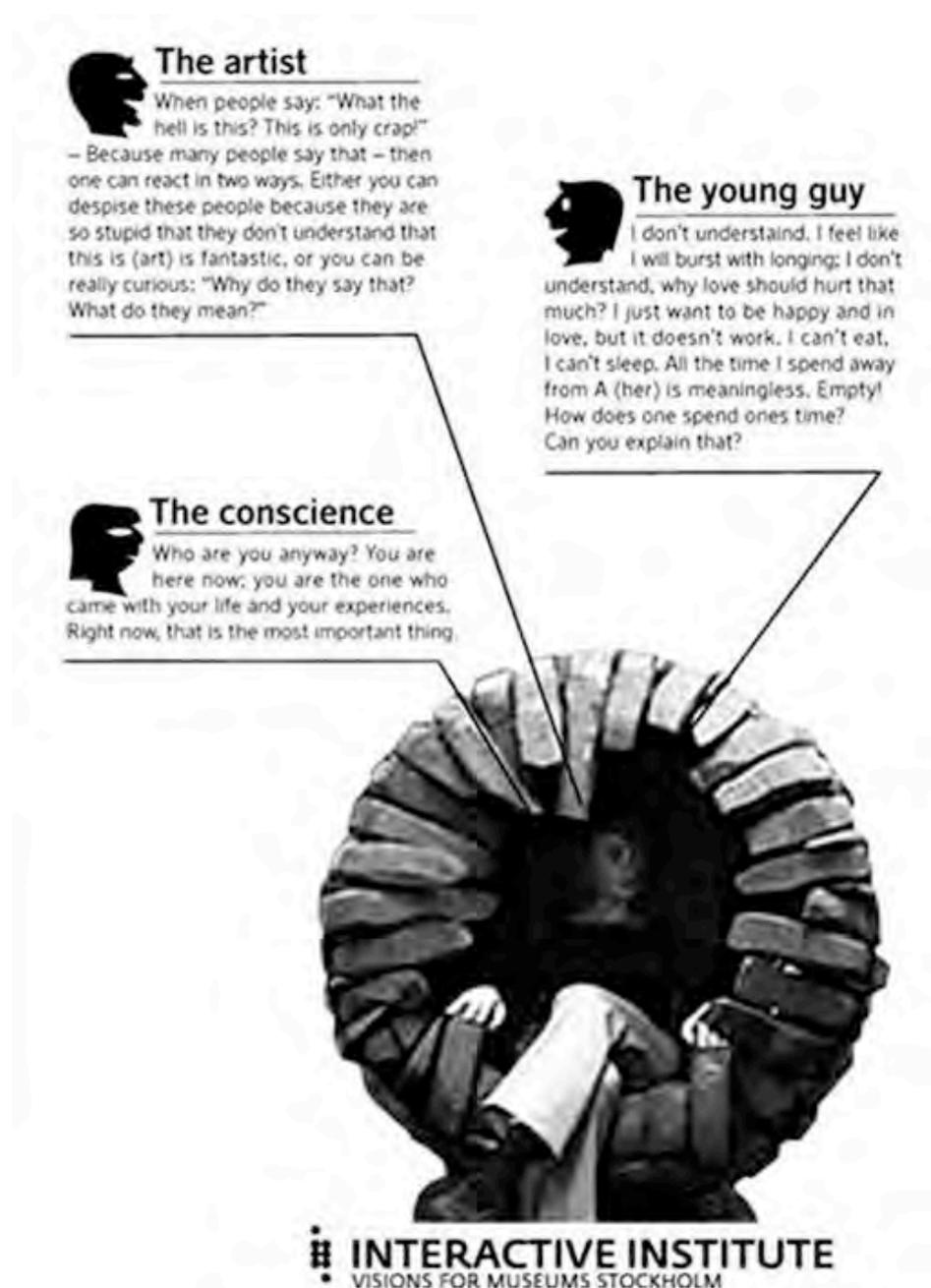


Figure 1. Access in Mind and example of the voice collage.

III. Aims and research questions

The aim of the study was to evaluate the young visitors' experience of the audiovisual installation *Access in Mind*; their conduct in the gallery space and their perception of the exhibition. We wished to study some of the visible aspects of communication and interaction between visitors in the learning situation at the gallery, and as a consequence discuss possibilities for enhancing learning. The research questions were consequently: How do young people behave during a visit at an art exhibition (as documented in video recordings), and how do they describe their experience in questionnaires [1]?

IV. Theoretical perspectives on learning and on art experience

The theoretical framework of this study is primarily based on the socio cultural perspective, evolved from theories based on the work of Vygotsky (1986). This perspective, as defined by Wertsch (1998) is primarily concerned with learning as it occurs in interaction between people in social contexts and through use of cognitive and physical tools. In Human-Computer Interaction research, a similar perspective (based on the work of Soviet psychology of Vygotsky, Leont'ev and others) is used, referred to as activity theory. In HCI studies, there seem to be an emphasis on mediation by physical tools, rather than as in socio cultural research on mediation by language (Nardi, 1997). According to Vygotsky, learning occurs as a consequence of a social interplay between individuals. The concept of "the zone of proximal development" implies the learning potential in the space between peers:

The zone of proximal development is the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers (Vygotsky, 1978, p. 86).

Learning can be understood as both a process and as a result of human activity. In separate social contexts, different kinds of activities and situations of communication are being developed and also required by individuals. These activities help the individual to organize the language. Wertsch (1998) speaks about different activities related to different kinds of social and linguistic conventions. Studying art is an activity that not everyone has complete mastery of which may lead to the feeling of frustration for some and to the social exclusion of certain parts of the population. Learning, as a social phenomenon, can be described in terms

of interaction between an initiated person and a person less skilled. This means that there often is a certain amount of asymmetry in knowledge between people engaged in a conversation that becomes the driving force in the conversation. Thus, learning in a gallery environment would also depend on the communication between the more experienced visitor and the less experienced one.

The socio cultural tools in this study would be the recorded narrations used in *Access in Mind*. Visitors, who try out the installation, meet three different voices of which two of them can be characterized as being initiated. Their expressions used when talking about contemporary art can be viewed as cognitive tools, which can enhance the learning potential of a visitor.

We see knowledge as situated in action as well as in language, and further more that language reflects states of the world. This pragmatist view has led us to the study of language use in questionnaires [2]. In these texts, written by the young visitors, we specifically consider aesthetic experience as part of the learning process in the gallery (Dewey, 1987). In a multimodal perspective, different forms of communication are given equal importance. Different modes, such as verbal communication in speech or writing, gestures or images are always present in communication, and play different roles in processes of meaning making. In this study, we focus on the modalities that include language as speech, use of gestures and positioning in space.

We have been influenced by a recent, yet not published, Swedish study which investigates the role of aesthetic experience in science education (Wickman, 2004). In this study, aesthetic experience and learning is analysed as action and especially focus on learning as talk. The study was applied to an authentic practice in science education (field work in ecology, and laboratory work in zoology and chemistry in freshman science courses at the university) with collected data consisting of language as speech. The study was motivated by the fact that the aesthetic dimensions of science are not commonly recognized or understood.

The results showed that when aesthetic judgements were used by the teachers in class, this affected the students to use the same linguistic structures. The aesthetics had a cognitive relevance for understanding science and validity for the students' learning.

In our study at Liljevalchs art gallery, the topic of aesthetics is perhaps more logical or evident, since it might relate to the subjective and personal as opposed to the rational mode connected with science. A fact remains that many people find contemporary art difficult to understand and sometimes even label it as "not being real art" (Havland & Helander, 2000, appendix 4, p. 4). This led us to the assumption that studying contemporary art requires some kind of culturally grounded training or introduction for the uninitiated.

V. Methodological implications

Selection

The current study was designed to evaluate the installation *Access in Mind* in a real world context, in situations where young visitors experienced the exhibition without personal guidance. In a socio cultural perspective, learning occurs as a consequence of the social interplay between individuals. This led us to the decision to investigate the interaction between visitors in pairs, which could be described as a social context.

The study was designed as a case study, comparing the informants who had first experienced *Access in Mind*, and them who had not experienced it before visiting an exhibition of contemporary art. We wanted to study both the young visitors' conduct and their written reflections after their gallery tour. The focus has not been on their verbal exchanges in a conversational analysis. From a perspective of multimodality, other modes besides language as speech were given equal attention, which lead us to limit the possible aspects of the communication in the art hall [3]. Therefore, we primarily focused on gestures, position in space and duration of time.

It is difficult to measure the importance of individual experiences, and with the small amount of data, we cannot lay claim to any generalization of the research results. We would rather consider this to be a pilot study, with results pointing in an interesting direction. In a future study, a larger amount of data could complement the key findings presented here.

Field of study

Liljevalchs konsthall is an art gallery and museum of Swedish and international art in Stockholm. Every year it hosts about four exhibitions of contemporary and modern art. Recurring features are the Liljevalchs mid-career retrospectives as well as the annual Spring Salon that usually take place around February.

Concurrently, traditional art platforms are experiencing difficulties in attracting younger visitors. A lot is indicating that the art community needs new ways and methodologies to create a platform for a new, young audience. The educational department at Liljevalchs had expressed their difficulties in communicating with younger visitors about contemporary art, especially during the Spring Salon, which presents this type of art. In conjunction with the Spring Salon 2004, a project called *Unga Ingångar* was initiated as a collaboration between Visions for Museums, Liljevalchs konsthall, Kulturhuset Lava, Konstfack and Mediecenter

(who are institutions for culture, education and media that specialize in interpretations, pedagogy and youth culture), as a mean to address issues concerning new ways to reach young visitors.

The project *Unga ingångar* was initiated so as to create a platform of discussion concerning questions about art pedagogy, contemporary art and digital media. The project was carried out from February 2nd to March 5th 2004, and laid down foundations on which further research and pedagogical work surrounding art mediation and digital media can build.

The project *Unga Ingångar* focuses on different age groups in school, starting at children in 4th grade and ending with people in secondary school, or high school, where different prototypes as *Access in Mind* can be used as a mean of creating starting points for discussions.

Informants

We had in advance contacted teachers in high schools and colleges that were coming to the Liljevalchs art gallery with their pupils for a guided visit. At the entrance to the gallery, the seven different groups were received both by their guide and by the authors of the study. On arrival, we informed the pupils about the purpose of the study and asked them if they wanted to participate. The informants that wanted to participate in the study consisted of 30 pupils between the ages of 13-18 years with a fairly even distribution of age and with a fairly even gender distribution (fig. 2). The number of participants between the ages of 13-15 years were 14 (8 males and 6 females) and between the ages of 16-18 years were 16 (6 males and 10 females). None of the pupils in the 16-18 years age group was involved in any arts-related program. They were studying at programs with natural science, ICT or social science as a major subject, but had some regular classes in art education.

INFORMANTS	Boys	Girls	Total
Number of pupils being video recorded and answering questionnaires	14	16	30
Number of pupils between the ages of 13-15 years	8	6	14
Number of pupils between the ages of 16-18 years	6	10	16

Figure 2. Number of informants related to age and sex.

In each group, we randomly choose two pairs of pupils for the investigation; one pair who would be introduced to the exhibition by the guide, these are referred to as category A, and the other pair who would be introduced to the exhibition by *Access in Mind*, referred to as category B (fig. 3). Practically, this meant that only four of the pupils from each group would

participate in the evaluation of *Access in Mind* while the majority of the pupils would go on a regular guided tour with a personal guide. The pupils who accepted to be a part of the study were asked to sign a form which guaranteed anonymity for the participant, careful use and storage of the data by the research group. They were also informed that they were going to be video recorded in one of the rooms of the exhibition [4]. All pupils who participated in the study did so voluntarily and could discontinue at any time.

CATEGORIES OF INFORMANTS	Boys	Girls	Total
Category A Pupils being introduced (~3 min.) to contemporary art by a guide Method of study: video recording and questionnaire	6	8	14
Category B Pupils being introduced (~3 min.) to contemporary art by <i>Access</i> Method of study: video recording and questionnaire	8	8	16

Figure 3. The two different categories of informants in the study; category A and B.

The pupils that were going to serve as subjects in the study were asked to look at the art in their own pace and according to personal interest. These were their instructions: “Look at the exhibition any way you want. If things do not interest you, just move on to the next thing that does. A camera will be placed in the first room, but we want you to study the entire exhibition in a way that you normally would.”

Access in Mind was located in an adjacent room immediately connected to the entrance at Liljevalchs and to the room of study (fig. 4). From each group, one pair was instructed to go directly to the exhibition after being given a short introduction by a guide (category A), starting with the room of study where the camera man was placed. The other pair was instructed to start with *Access in Mind* (category B) before entering the room of study. After the voice collage (a loop of approximately three minutes) the *Access in Mind*-students should continue to the room of study and the exhibition as well. When they had left the room of the study they were given the questionnaires and instructions about how to fill them in. After filling in the questionnaires they continued to the guided tour with the rest of the group.

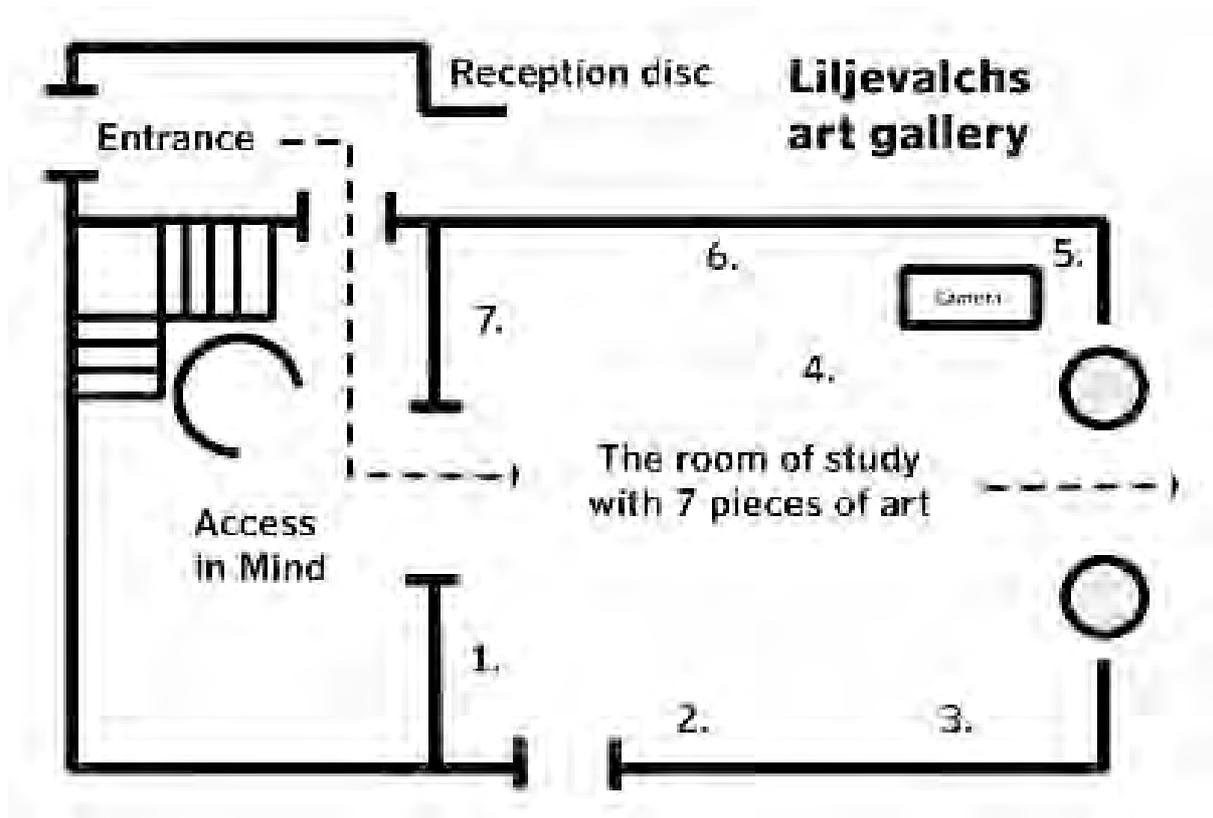


Figure 4. Liljevalchs art gallery, Access in Mind and the room of study.

Data format

The collected data consisted of approximately two hours of video recorded material and of filled out questionnaires (with open questions). The authors of this study watched the material several times to be able to detect certain patterns in the movement and action in the room. We could observe and make conclusions about the following areas; interest/disinterest of the art (stops and examines actively or passes quickly), time spent at each piece of art and visual interaction between the two young visitors.

In the questionnaires, the informants openly commented on the following topics; experience with museums, previous knowledge of history of the arts, habit of engaging in artistic activities, educational background, special memories or impressions of one or several of the art objects in the exhibition, the themes for their conversation during the visit, their experience of *Access in Mind* and their personal definition of contemporary art [5].

Our findings were transferred to a spreadsheet, containing the different findings from the video recordings and answers from the enquiries. This allowed us to see patterns and connections more easily.

Analytical concepts

The three different voices of the narrations in *Access in Mind* reflect different possible ways of relating to contemporary art and are emphasizing the importance of being open minded. There is no right or wrong when interpreting contemporary art and the observer must allow himself/herself to loose control, to leave prejudices behind and to really meet the art or the artist in a dialogue. But at the same time as *Access in mind* aims at encouraging the visitor to feel free in his or her interpretation, it also aims at providing the visitor guidelines for how to talk about contemporary art. The narrations in the installation reflect a certain attitude towards art that we wanted to find out if it was possible to detect in the answers in the questionnaires. Would the relation between *Access in Mind* and the visitor resemble the asymmetry in knowledge that often occurs between the participants in a conversation? Would the visitor learn from the more initiated, which in this case would be the narrations in *Access in Mind*? Within a socio-cultural perspective, learning is seen as a process of *mastery* (knowing how) and *appropriation* (to make something one's own), where the learner uses the knowledge and skills of the more initiated to solve problems or tasks (Wertsch, 1998).

In the questionnaires, we analysed the young participants' comments about *Access in Mind* and also their art experience in the exhibition. Three questions in the enquiries were directly related to these issues. There was the question about the visitors' view of the installation, the question about special memories or impressions of one or several of the art objects in the exhibition and the question about themes for the visitors' conversation during the visit.

When analysing the answers of the young visitors we used the concept of *aesthetic experience* (Dewey, 1987) which is an important introduction to the understanding of the possibilities for learning in a museum or exhibition space. The voices in *Access in Mind* uses aesthetic expressions such as “nice”, “ugly”, “stupid”, “really good”, “worthy”, “fantastic” and “silly” when relating to art:

And why does art exist anyway?

Is it to make us happy watching it? Or unhappy?

Does it *have* to be beautiful?

To be honest, ugly is quite interesting.

So, what we paid attention to in the questionnaires were answers with aesthetic judgements that might have derived directly from the voices in *Access in Mind*. But we also took notice to the presence of other specific words or expressions in the questionnaires, which could be

related to *Access in Mind*. The questionnaires were consequently analysed by the application of the concepts *mastery* and *appropriation*.

Multimodal communication embraces a number of modalities, not just language. In learning situations modalities like positioning in space, gestures and images, are all given equal importance, although they might be used in communication for specific purposes (Kress & van Leeuwen, 2001). Therefore, we choose to pay specific attention not only to the answers in the questionnaires, but also to the observable communication and interaction of visitors in video recordings. For the analysis of the video recordings, we used the following concepts based on a multimodal perspective: *interest/disinterest*, *time spent viewing each piece of art*, *observable interaction between the visitors and gesticulation*.

VI. Results

Questionnaires

We will now describe how we analyzed the informants' written reflections concerning *Access in Mind*, their remembrance of the art and of the conversation they had during their tour. In general, the young visitors' comments about *Access in Mind* were positive. They described the installation in words as "exciting and very interesting", "comfortable and calming", "relaxing" or "mysterious or enchanting". This is a quotation of one of the visitors (translated from Swedish):

It was really cosy and the voices felt very fascinating. Can imagine one could brainwash people in that way if you sat there day and night. The buzzing, thrusting effect was good... one became attentive.

Another young visitor describes the experience in this way:

Sometimes stressful, sometimes calming. It felt like it affected me a lot. It was lovely to sit in it. It was like someone was taking care of you. I would like to sit in it again.

Other visitors were not as enthusiastic, and one even described the installation as being "bad" or "boring". This is a complete quotation from another:

Sometimes a bit unpleasant, though it did start a lot of mental activity. For example, I thought a lot seemed to be about anxiety.

Aesthetic judgement

In the questionnaires, there was a frequent use of expressions related to aesthetic experience; both positive and negative comments about what the informants had seen. The positive judgements were about as common as the negative judgements; 31 positive and 34 negative words or phrases were discernible. The answers below relate to remembrance of the art, translated from Swedish (the pupils are here being referred to as numbers instead of using their real names):

3: Yes, there were people painted like airplanes. It was **really good** and **profound**. I like the colours.

5: The painting with humans with wings on them was **cool**, nothing I would put in my room, but it was **beautiful** in its own way. I would like to know more about the flying creatures, were they humans? The colours were dull but they had wings, a shut-in feeling and freedom at the same time! **Strange!**

11: The oil paintings were **beautiful** to look at, at the same time they were strange.

14: A picture with a fighter aircraft, because it was **well drawn** and it was **nice** with black background.

15: I remember the vacuum lady. It was **strange** but **fun**.

23: A butterfly. It was **nice** and there was two of it.

2: The **bizarre** lady with the vacuum cleaner in her mouth. The works of art were generally very **frightening** and **dull**.

11: The pictures drawn in lead depicting naked humans were unpleasant. They were unreal with their bodies and faces.

The answers below relates to subjects of conversation.

1: Separate images were not so special, but together they were **awesome**.

14: Like; "This picture is **nice**."

31: If we had seen anything like it before, if things were **cool, awesome or weird**.

11: We only discussed separate images. Not the entirety. Often, we reacted to the same pictures. For example the one in oil with little creatures that looked like pygmies on all fours. It was **strange** but at the same time **beautiful**.

2: The painting of Bamse [a popular figure in a Swedish cartoon] that got his head cut off, we both thought it was **horrible**.

5: We talked about the pictures on the left wall, we thought they were **ugly**.

24: The **coolest** picture: The police pig, and talked about ideas for paintings.

Thought the sculpture was a little **perverse**.

Mastery and appropriation

In the questionnaires, there were also findings that gave hints about an influence from *Access in Mind*. When we asked the young visitors about their definition of contemporary art, they used expressions that might have been inspired from the voices in the installation. In a socio cultural perspective, this is seen as reported speech, the uninitiated (a young visitor) reports the same words as the initiated (the narratives in *Access in mind*). In *Access in Mind*, you can hear the following;

“Art is about the everyday life of people. Art is about everything that is of immediate interest and important in our existence”

This can be compared with the way an informant, here referred to as pupil number 5, describes contemporary art:

5: It is when you can make a comparison between pieces of art and your everyday life.

In *Access in Mind*, there is a piece about that contemporary art can be made of all kinds of material and can be performed in new media like video and computers.

“Heaps of materials, because if you consider, EVERY MATERIAL can be used. And new media; video, computers...”

Those lines can be compared with the answer from another pupil,

7: To me, art is a way of expressing one self, and therefore clothes can be art for me today. Even websites, these can be both appealing and repulsive.

Yet another informant, pupil number 14 describes contemporary art in a way, which relates to the following quote from *Access in Mind*: “Contemporary art is the evolution of art during the last 30 years, not more....art that concerns everything that is of current interest.

14: Art is about what is happening right now.

Using the analytical concepts introduced above; this could be described as *mastery*; the uninitiated has a superficial understanding of certain concepts, but does not yet fully understand the complete meaning of them. In a broader perspective, this mastery could evolve to what Wetsch (1998) calls *appropriation*; that a word or a concept become one's own.

Another, more sophisticated answer to the question about what contemporary art might be is;

1: A reflection of society, impressions and feelings.

In this case, the young visitors' answer goes beyond the narrative in *Access in Mind*, which mentions "society" and feelings in the following way:

"Everything in the entire society changes. What if art didn't change, what would happen then?"... "Art as being contaminated by the society"..."And why is there art? Is it to make one happy while looking at it? Or maybe to make one sad?"

The video recordings

The time factor

The most easily measured feature in the video recordings was the time (fig. 5). An important observation is that the time spent in the room of study increased among those young visitors that had been introduced to contemporary art by *Access in Mind*. The average time spent in the room of study was, when having experienced the installation, 8,61 minutes. The corresponding numbers for the group that were introduced to contemporary art by a guide was 7,18 [6].

When studying the recordings and comparing them with the questionnaires we could notice how the average time the visitors stayed in the room increased with their age and with their background knowledge of art. There was a correspondence between their former experience of art and their interest of the exhibition. The average time pupils with some knowledge of history of art stayed in the room was 9,06 minutes, while the average time for pupils with little or no knowledge of history of art was 6,88 minutes. This tells us something about the importance of the visitors' identity, previous experiences and knowledge; the visitor looks at the exhibition through the filter that consists of his or her experience. Fienberg & Leinhardt

(2002) have shown that there is connection between visitors' identity and the conversation created during a visit to a museum.

TIME STUDIES	Shortest Time	Longest time	Average time for boys	Average time for girls	Total average time, boys and girls. (Without extremes)
Minutes category A stayed in the room of study	3,46 [2 boys]	21,29 [2 girls]	7,76	9,81	8,78 (7,18)
Minutes category B stayed in the room of study	3,33 [2 girls]	15,23 [2 boys]	10,59	7,43	9,01 (8,61)
Minutes students between the ages of 13-15 years stayed in the room of study (categories A+B)	3,33 [2 girls]	15,23 [2 boys]	8,76	6,28	7,52 (7,06)
Minutes students between the ages of 16-18 years stayed in the room of study (categories A+B)	4,10 [1 boy and 1 girl]	21,29 [2 girls]	10,23	9,31	9,77 (8,49)
Minutes students with little or none knowledge of history of art stayed in the room of study (categories A+B)	3,33 [2 girls]	15,23 [2 boys]	8,97	5,91	7,44 (6,88)
Minutes students with some knowledge of history of art stayed in the room of study (categories A+B)	4, 10 [1 boy and 1 girl]	21,29 [2 girls]	4,10	11,01	7,56 (9,06)

Figure 5. Time related to different visitor categories.

Interest/Disinterest

We will now discuss the young visitors' interest in the exhibition and how it was observable. In the video recordings one can notice that most of the time it is rather difficult to tell what expressions the visitors got on their faces while looking at the art. They often got their backs toward the camera. But noticeable is how some visitors look at the art really quickly and don't seem to be interested in it, while others are standing close to the pieces of art and are scrutinising every detail very carefully. Therefore we analyzed the visitors' interest using the number of items that caught their attention, the amount of pieces of art they stopped at (fig. 6). There was a small difference between category A (who had been introduced to contemporary art by a guide) and category B (the visitors who had experienced *Access in*

Mind). There were a total of 7 pieces of art in the room. While the category A spent time in front of an average of 5 pieces of art, category B made stops in front of 6.

	ATTENTION TO NUMBER OF PIECES OF ART (Total number of pieces of art in the room of study =7)
Category A	5
Category B	6

Figure 6. Attention to number of pieces of art.

We noticed a different pattern when observing and comparing the categories A and B with two other visiting groups at Liljevalchs (the pupils were between the ages of 16-18 years and had a great knowledge of art according to their teachers). These two groups got a short instruction from their teachers, who asked the pupils to carefully study the pieces of art in the room. The pupils were not given any further introduction or information about contemporary art. It was noticeable how these young visitors only glanced very quickly at an average of only two pieces of art per student! They lost their interest rather quickly and left the room.

Visual interaction between the young visitors

In the video recordings, we could observe mainly two different ways of interaction between the visitors in a pair. If one of them behaved like the leader of the two, it was usually that person who initiated a conversation about the art, decided where and when to stop and when to leave and so on. The other pupil then imitated the movements of the “leader” and followed that person and behaviour but never took an initiative on its own. This way of interaction gave the impression of being mainly a one way communication, with aspects of power to consider. When the pupils were close friends, the learning process seemed to be taking place between two peers - if one of them made a comment and pointed at a piece of art the other one answered back and immediately pointed at another work. They took turns in taking initiatives. Pointing and a commenting about a piece of art were always followed by a similar behaviour from the friend. This way of interaction worked like a dialogue.

Gesticulation

When studying the video recordings we could see how some of the visiting pupils went rather quickly from one piece of art to another while others stayed quite a long time in front of each piece of art. It was often impossible to tell what expressions the visitors had on their faces because they had their backs towards the camera. But the way the visitors moved their bodies

while watching the art sometimes seemed to express indifference, disappointment, happiness or other feelings. What we could observe more easily on the video recordings was how much gesticulation they were making. But we noticed that some of the visitors were making a lot of gestures in front of every piece of art while some never made any gestures. Therefore the amount of gestures might possibly be more a matter of personality than any proof of interest or disinterest.

Conclusion and discussion

Most of the young visitors´ described their experience of the installation *Access in Mind* in the art gallery Liljevalchs in positive words. In many of the questionnaires the installation was described with words as “exciting and very interesting”, “comfortable and calming”, “relaxing” or “mysterious or enchanting”. In these answers, we could also notice that the narratives in the installation had a more profound effect on the visitors. One visitor thought that the installation might affect the sub consciousness; another one mentioned that it started mental activity, yet another said that it felt like as if someone was taking care of you.

Our conclusion from comparing the video recordings with the questionnaires is that *Access in Mind*, together with the visitors’ age and previous knowledge of art, seem to affect the visitors’ interest in the exhibition in a positive way. The result in this study show that young visitors spent more time in the chosen room if they first had experienced *Access in Mind*. When studying the interaction between the pupils, we could discern two different ways of interaction; the interaction in pairs with an obvious leader and the interaction in pairs that were more like peers. It was not possible to make any conclusions about their gesticulation, since it may both be signs of interest and of personality.

In our analysis we use the concepts *mastery* and *appropriation* to reach an understanding of how *Access in Mind* inspires the young visitors to communicate about contemporary art. The uninitiated visitor learn from the more initiated (the installation), and uses expressions and aesthetic judgements in a similar way. We argue that *Access in Mind* works as a cognitive tool for the visitor. It helps the visitor to learn aesthetic distinctions, to notice relevant aspects of the works of art and therefore give the visitor ways to communicate around contemporary art with others. Moreover, these aesthetic judgements tell us about the visitors’ aesthetic experience, positive or negative, in the current exhibition.

In this study, the presence of the camera (even though it was discreetly placed) can not be neglected and probably affected the behaviour of the visitors to some extent. When studying

the recordings it was noticeable that most of the visitors neglected the piece of art that was next to the camera (number 5, fig. 4). One of the students in a pair seemed to be trying to get the camera man's attention which might have extended the time they stayed in the room. However, most of the visitors did concentrate on the pieces of art while being in the room of study.

There is a big difference in the way the young visitors answered the questionnaire. Some of them answered with rather short sentences and quite bad spelling. Other questionnaires were very well written. But the ability to verbalize does not have to be connected to ones' skill to *appreciate* art. One could especially notice a pair of male pupils that stayed for the longest time in the room and really seemed to be interested in everything they saw, and were discussing and pointing at every piece of art. They have given very short answers in the questionnaire, mostly "yes" and "no" answers. These pupils are a perfect example of the necessity for combining video recording with questionnaires. Social learning can be just as important as verbal learning:

Conversation is a primary mechanism of knowledge construction and distributed meaning-making. However, not all of the behaviours observed in these communities of learners are verbal. Group members observe each other to gain information, to figure out how to interact with exhibitions, and to learn effective ways to engage in inquiry. Modelling, also called observational or social learning, is a frequently observed social behaviour both within and between groups (Falk & Dierking, 2000, p. 110).

Several pupils mentioned in the questionnaire the importance of recognising something in a piece of art. The pupils responded positively when they saw something they could relate to. If they couldn't find these connections to their own experiences and their own world they usually seemed to lose interest. Therefore, a way to create good possibilities for learning when introducing contemporary art (either by a guide or by *Access in Mind*) is to provide the visitors with links between their world and the contemporary art scene. An example is, when asked about which pieces of art they remembered, most of the young visitors mentioned a collage with drawings imitating photos from different wars that one has been seen on TV or in the newspapers rather recently. Two pupils found a drawing of the rap artist *50 Cent* who they like a lot and therefore they remembered that drawing in particular. Two others remembered a drawing of a pig in a police hat. They answered that they appreciated that drawing because they like graffiti and think that the police stop them in their art interest. Falk & Dierking (2000) note:

New learning is always constructed from a base of prior knowledge. Prior knowledge is properly understood not as a case of failure or success but rather as the raw material that fuels learning (Falk & Dierking 2000, p. 33).

In the questionnaires, we noticed that the young visitors' general attitude towards contemporary art, turned out to be quite positive (fig. 7). Thirteen pupils out of thirty seem to be altogether positive to contemporary art. Eight pupils have given answers that can be described as being "open but with some reservations" to contemporary art. A common attitude among these pupils could be described as "it's not proper or real art if anyone can imitate the drawing, painting or sculpture. Proper art should look like it's a really skilled artist who has done it." And when the young visitors were asked about what topics they were discussing in the room of study, many of them (11 out of 30) answered that they were discussing about how simple looking, and how easy to make (in a negative sense) some of the paintings and drawings were. Only six young visitors gave answers that could be interpreted as them being altogether negative to contemporary art.

ATTITUDES TOWARDS CONTEMPORARY ART	Category A (intro by guide)	Category B (intro by Access)	Total Number of pupils	Creative hobbies
Positive	7	6	13	11
Open, but with reservations	4	6	10	8
Negative	3	3	6	5
Uninterested (either in filling in the questionnaire or in contemporary art).	1	0	1	0
Total number of participating pupils from each category	15	15	30	24

Figure 7. The young visitors' attitudes towards contemporary art.

Another observation from this pilot study is that either a guide or the installation *Access in Mind* can help the visitors to find a link between their own life and contemporary art. When we, out of curiosity, observed two other groups at the same location, who were not given any introduction (except the task their teacher gave them: "Look at these pieces of art for a couple of minutes!") we noticed that these pupils didn't interact with the works of art. They did communicate with each other but didn't show any interest in talking about the art. They just

glanced very quickly at the walls and didn't seem to care much about what they saw before they left the room.

Notes

1. The following concepts were used in the analysis: interest/disinterest, time spent at each piece of art, visual interaction between the visitors and gesticulation.
2. In a pragmatist perspective, as in the works of Dewey, knowledge is created through action, and is used for solving problems and to give guidance for continuing actions.
3. The exhibition was open to the public so there were usually a number of other visitors in the room at the same time as our informants, which sometimes influenced the way the informants moved and which would have made it difficult to record their conversations.
4. The camera and a camera man were discreetly placed in a corner of the room and he was instructed to follow the visitors with the camera from this fixed position.
5. The questions were: 1) Which program are you studying in school? 2) How often do you visit museums during a year? 3) Are you studying history of art in school or on your spare time? 4) Do you have any creative hobby (such as painting, sculpture, graffiti, photo, ceramics or something similar)? If so, tell us about it. 5) Do you remember any particular piece(s) of art from the room where you were being filmed? If so, tell us about your experience of this piece of art. 6) Can you retell what you were talking about while studying the pieces of art in the room? 7) What was your perception of *Access in Mind*? 8) What is contemporary art to you?
6. These numbers represent the average time when the extremes, the shortest and the longest time in each category are excluded.

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