

Narratives From the 3D Agora-world

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ABSTRACT

This paper is in five narratives based on first hand experiences with 1) being present in a virtual environment (VE) such as the 3D Agora AWEDU presented as an avatar; 2) sensation and communication in avatar based interaction; 3) conventions and the breakdown of conventions in avatar meetings and; 4) knowledge sharing based on reflection-in-(inter)action when exploring and experiencing the VE. The conclusion suggests a concept of “multi-faceted” interaction to be the centre of interest for further research on VEs and avatar meetings.

Keywords

Avatar, virtual presence, virtual sensation, virtual conventions, knowledge sharing, awareness, chat, 3D worlds

INTRODUCTION

This paper is about first hand experiences that come from building a 3D Agora world in Active Worlds Educational Universe (AWEDU - www.activeworlds.com). It is in a narrative form and the focus is on presence and knowledge sharing in interaction with avatars³⁵ communicating in chat. These first hand experiences and reflections all come from explorative sessions carried out in a special interest group (SIG 5) on “Knowledge sharing across knowledge cultures”³⁶ in the EU EQUER project on quality in e-learning. The idea with the explorative and joint sessions was to form a community of shared knowledge based on practicing, acting and interacting with avatars in 3D worlds. The underlying assumption being that first hand experience with collaboration and knowledge sharing is essential, if we are to get a feel for the situation in this new, complex and also somewhat unfamiliar 3D environment. A feel for the situation which has proved to be of importance to the process of reflection-in-(inter)action so significant to knowledge sharing. In the Agora SIG we thus assumed that first hand experience with the virtual 3D environment would be a precondition for building shared knowledge of access, navigation, action, building, interaction and communication. Our approach to research was therefore based on self-observation and self-reporting activities very much in line with Nielsson et al.: “it [the method] is not experimental, nor participant observation, nor is it a protocol-based evaluation of a new system. Instead, we borrowed from all of these approaches and deliberately set out in this eclectic manner in order to avoid the limitations of other methods” (Nilsson et al., 2002: 117). With this approach in mind, we will first identify some of the general themes that appeared to be of importance during our meetings and explorations: “presence”, “sensation” and “conventions”. Secondly, we will present five narratives: “Being a novice”, “My initial experience”, “My learning process”, “Different locations” and “From novice to skilled avatar”. The narratives are based on each of the narrators’ own evaluation and choice as to what to communicate from the exploration of the 3D Agora AWEDU.

³⁵ An avatar is the figurative representation of actors or participants in 3D worlds or environments.

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Presence

The choice of avatar and avatar name is commented on in the narratives. Some of the participants feel very comfortable with the appearance of their avatar and also feel some kind of attachment to the figure either because of the resemblance or the difference from themselves: *“so I learned to change my appearance and become the elegant woman I can only dream of being outside of Agora”* (*“Different locations”*). Others can not find an avatar matching the personality they want to project and they feel uncomfortable about being imaged by an avatar: *“My initial sense was of a mild constraint having to select and adapt rather than display my own identity or construct an identity”* (*“My initial experience”*). However, it seems that the choice of name for the avatar makes up for the lack of personality in the figurative representation as an avatar: *“In the end, I came to like my strange name which I gave to myself on impulse, but I never found an avatar that I really wanted to be”* (*“Being a novice”*). The focus on choice of avatar and/or name seems to point at an awareness about self-presentation and thus also self-consciousness. This awareness indicates that there is a strong sense of presence felt when being in the Agora world. A presence and an awareness which is also reported in research literature of relevance to our explorations (Hudson-Smith, 2002; Becker and Mark, 2002). This feeling of being present is, however, also a feeling of being volatile due to the potential anonymity. If the virtual presence and with that the feeling of being able to *“sink into the ground”* (*“From novice to skilled avatar”*) is combined with the ability to change avatar/self-presentation then it seems to create an atmosphere of freedom to speak: *“I could express myself more easily”* (*“My learning process”*). This virtual presence played a major role for some of us in the Agora world while being novice avatars. Then, the focus was very much on the mediation itself, the environment, the appearance of avatars and the movements, and it seemed as if the richness of the Agora and the AWEDU in itself was enough to attract attention. However, as time went by this virtual presence was replaced by the activity itself as it became more focused. As purposeful interactions became more and more important, communication changed and the text/chat area became the focus. In this process of adaptation the medium receded into the background and as the environment became implicit, the feeling of presence grew stronger (Becker and Mark, 2002).

Sensation

In interactions with more than two avatars the difficulty of knowing what the other avatars felt, wanted to do, etc. also became obvious: *“I also felt deflected from this at times by Learning Lab colleagues who took on a teaching/facilitation role towards me to help me make best use of the environment”* (*“Being a novice”*). The richness of information in real world vision, sensation, perception and body language tells us or rather shows us in intuitional ways what the others feel, what they do and expect. We can “read” or sense the situation and the responses. This is not possible in the 3D Agora and misunderstandings among avatars easily occur: *“...torn between the pursuit of my own agenda to build, and being ‘good’ and available to be co-operative with and supportive of others who might be experiencing difficulties”* (*“Being a novice”*). Help and guidance might thus be perceived as intrusive. On the other hand, failing to help and guide easily gave rise to a feeling of being isolated or neglected in this world of avatars. What is obvious in social practice and in real world settings due to physical sensation and perception had to be expressed in explicit ways. This is demanding as one’s feelings are not always explicit to oneself.

Conventions

The process of adaptation is an important theme pointed at in most of the narratives; and it is also a theme in the research literature in which Nilsson sees it as a significant behaviour (Nilsson, 2002). The first avatar meetings in the 3D Agora and in AWEDU as such created an awareness of not only one’s presence, but also of social conventions and communication strategies as they were made explicit simply by not being there; or rather, the system did not support the many conventions that are implicit in everyday interactions of the real world. This creates an innovative and explorative awareness of having to overcome problems and constraints: *“...using a person’s name and so specifically addressing one’s sentences, it is possible to “see” who is speaking to who”* (*“From novice to skilled avatar”*). The adaptation is not just a question of overcoming problems and constraints as to communication, appearance, collaboration etc., but it is also a process of learning the conventions of virtual environments. They are rather similar to those in the real world (Jakobsson, 2002). The need for a zone of proximity is a virtual reality for avatars (Becker and Mark, 2002), and social roles and status are adopted over time in addition to the corresponding behaviours (Jakobsson, 2002). When avatars misbehave, conventions break down and this situation is very difficult to deal with, also in VEs: *“My perception of the distress levels within our virtual community was increasing. Constructive communication was breaking down”* (*“Different locations”*). Feelings and responses in the Agora world became almost as real and strong as in real-life settings (Jakobsson, 2002).

”BEING A NOVICE”

This narrative is about reflections on being a novice in the Agora AWEDU. It points at the awareness of self-presentation and the dilemma between cooperation and self-directed learning.

“This brief set of reflections is based on reviewing the transcripts from the chat of two Agora sessions (2nd & 16th May, 2003) to stimulate my recall of the experience. See Mann (2003) for a fuller account of this kind of personal inquiry approach.

My visit to the Agora on 2nd May was only my second experience in this context, and my first on my own from home. My third visit on 16th May was from my office at work. I experienced the first session on 2nd May as extremely intense. I was very conscious of being a novice and not knowing what I was doing or how I was supposed to behave. On my second visit on the 16th May, I felt more confident and was able to engage quite quickly with others in a cooperative process of shared building and peer teaching and learning. This was a very enjoyable session that was cut short by having to leave early to teach, whereas at home I had no distractions and could work until I was too tired.

Generally, I was conscious of the following concerns. I knew all the people I was interacting with in the Agora and yet at no time was I able to know clearly exactly who was ‘behind’ which avatar/chosen name. I managed to work out who three people were, and even that two others were from Learning Lab Denmark, but not their, or anyone else’s, identity. This left me with a constant underlying feeling of unease and being slightly at a disadvantage. I did ask at one point but didn’t get the information I needed. I decided to leave it, I think because I felt it might be interesting to pursue the experience of anonymity. Although of course, I did not assume that I was anonymous to anyone, despite my assumed name ‘Gertrude’ and my avatar. In fact, linked to this issue of anonymity was the issue of identity. I found it both interesting and ‘playful’ to be able to choose a name and avatar, but at the same time this was slightly constraining as I became conscious of ‘projecting’ a particular image of myself through my choice of name and avatar. Presumably, this would not have been such an issue if we had been truly anonymous. In the end, I came to like my strange name which I gave to myself on impulse, but I never found an avatar that I really wanted to be.

I experienced a tension between the need to participate and engage with others in the Agora in a ‘social’ sense, drinking beers, chatting, dancing and my own ‘learning’ agenda to begin to build. This desire to build was both a function of the need to for me to learn how to engage within AWs, and also because of my own strong aesthetic interest in design and gardens! I was blocked in this by the fact that AWs does not allow one to see examples of possible ‘objects’ to build with. I also felt deflected from this at times by Learning Lab colleagues who took on a teaching/facilitation role towards me to help me make best use of the environment. I also felt torn between the pursuit of my own agenda to build, and being ‘good’ and available to be co-operative with and supportive of others who might be experiencing difficulties.

Tonga:	Our plan was to build even more today
Gertrude:	I’m looking forward to having a go? (CHECKING OUT PERMISSION)
Tonga:	Choose a place and start building Gertrude
Tonga:	ask if you need help
Tonga:	are you building Gertrude?
Gertrude:	Hi tonga I have just tried copying these flowers to see if I can build (ASKING FOR CLARIFICATION)
Tonga:	come with me Gertrude I’ll show you something g
Gertrude:	okay I’ll follow t (SUSPENDING UNCERTAINTY)
Gertrude:	Hi I think I will continue to build – what was it you wanted me to see? (AFTER AN UNSUCCESSFUL DETOUR – FINALLY ASKING WHAT THE PURPOSE WAS)

At this point, I had three possible routes to follow: staying with my own learning process while building; trusting the ‘tutor’ and following her in the hope of learning something relevant to this; and helping another participant, Burning Bush, who kept falling down. Given the focus of this SIG on knowledge sharing, I think this is a very interesting example of the complexities of the process where some are more novice than others. It captures for me the dynamic collision of instruction with co-operation and with self-direction in learning. It shows the fragility of the individual learning process and how easily it can be disturbed by the need or felt obligation to co-operate, either with ‘teacher’ or with fellow learners. I subsequently learnt quite a bit about making contact lists and sending telegrams, but I still didn’t progress on my building in this session.” (Sarah Mann)

"MY INITIAL EXPERIENCE"

The choice of avatar and the question of self-presentation that this entails is dealt with in this narrative. Also, it reports on how technical problems might interfere with and restrict interaction and collaboration with other avatars.

"This short record of my experiences in AW will begin from a relatively un-theorized position in terms of:

1. How I was able to represent myself within an avatar enabled setting,
2. The experience I had of technical and social constraints.

Representation within AW is in the form of text messages that appear in windows much like an ordinary synchronous chat area and by way of fixed character graphical representations that can be selected from a limited array that is specific to the local world or area of AW that you are engaged with. Gestures and movements are associated with the different avatars. The sense I had of representation was a little like entering a play area and selecting clothes from a dressing up box. My initial sense was of a mild constraint having to select and adapt rather than display my own identity or construct an identity. This sense was reinforced by automatic movements being associated with the avatar outside of the control of the person represented by the avatar.

This sense of distance from the avatar representations connected to a wider sense of alienation. The context of AW is not just the avatars and the affordances built into the technology it is also a mutual reading of intentions. In AW I was never sure what I was 'meant' to do. On the other hand I had a sense that the space was not free form. This led to two reflections. The first was that we were in some ways novices, highly dependent on guidance and not fully capable of being independent. I was not sure if this was a temporary phenomena that would have diminished with time or connected to the deeper processes of working in this type of environment. At one point in our experiments there was a sharp breach of trust in which I felt I was a 'Lab rat', not in a negotiation of meaning with others but subject to an experimental situation and under scrutiny. I think this experience is more to do with how the system was used but it illustrated for me how fragile the identities were that were created in the avatar world and how much they depended on real world supports.

Secondly I was unsure about whether the visual interface added to or hindered the negotiation of meaning online. This may have been related to the text interface and I wondered if it would have felt more authentic if avatars spoke over an audio link. I wondered if some would be happier writing text writing not being confused by all the additional elements of the virtual space. Writing text has a meditative aspect that the rich AW space might disrupt.

Technical problems inhibited my participation on several occasions but I enjoyed the process when it worked well from a technical point of view. The particular problem I had was that when connected using a high-speed network my avatar kept falling down the 3D space and I was unable to hold a position with the other avatars. Interestingly this affected my choice of avatar character as I chose to represent myself as a figure in a hover chair and eventually worked around the problem by hovering at 0 metres: *a)* this stopped me being properly engaged and at some times I felt everyone else was carrying on regardless of my difficulty. It was interesting that I felt 'neglected' in some sense. In contrast at other times I had a one-to-one conversations during these problems and felt I no isolation, not only from the individual I spoke to but from the group; *b)* the technical problems stop proper engagement. A working system would need to be very robust and include social systems, not only technical ones, to deal with difficulties faced by participants and failures in the system; *c)* the system was extremely good over a 52K modem link. I don't know how strongly to state this. It was very impressive as all systems worked and I could use my avatar, write and receive text and have open a web site all at home using a standard modem connection." (Chris Jones)

"MY LEARNING PROCESS"

This narrative is about a learning process and a feeling of freedom in the VE - a freedom to speak up with more confidence. It emphasizes that VEs allow us to see other sides of ourselves and to know each other in new ways.

"This is an account of my learning in the Agora SIG. I will describe my preconceptions, understandings, engagement and learning during the process of the Agora SIG from the perspective of how social, contextual and personal factors had an impact on how the above-mentioned aspects developed.

At the first meeting of the Agora SIG I thought I got an understanding of what the purpose of the SIG would be. The aim, which I understood as an exploration of knowledge cultures clashing in Networked Learning settings, I thought relevant to my own work as a staff developer at a Medical University. It was rather a vague aim, and in my opinion also flexible, and I hoped to be able to contribute from my own work to this aim as well as learning from others in the SIG. Also, it seemed interesting to try out this virtual world and find out whether it would be possible to use this world in an educational setting, perhaps for my own teaching, and build representations of some of the abstract concepts and discussions we are dealing with in education. I didn't really know how this would happen, but it was something we talked about at the meeting.

Except from what I understood of the purpose of the SIG, there were other motivational factors too. For me, this has been a process of getting to know one another at two levels; in the real world, because I knew some of the participants more or less well and others not at all when we started, and in the virtual world as Avatars, which was an entirely new experience to me. An interesting thing was that the virtual world interaction also created a new context for getting to know each other in the real world. We had experienced something together, in the virtual world, and it became an area for discussion in the real world. It was funny how important it felt to me to know who was who in the virtual world. Also, I noticed that it mattered to me to be able to see the avatar of the person speaking, as well as seeing myself in third person.

I feel that I am rather an extroverted person. I like talking to people, and I am usually not afraid of talking in a small group of people. However, I cannot say that I feel very confident in being researcher. I am rather new as a researcher, and I know that colleagues in the Agora SIG are much more experienced and knowledgeable than I am in the field. This made me insecure and sometimes quiet. I felt that my contribution was tiny. Then, in the virtual world, I had a different role. I was as new to this as anyone else, and I reacted by feeling more confident, and more extroverted perhaps, than in the face-to-face meetings and at the EQUEL site. The common experience of the virtual world also made me feel more at equal level in the face-to-face meetings that followed: My experience was valuable! My opinion mattered! Not that it would not have mattered before, but it made me more confident, so that I could express myself more easily. I think that I learnt something from this – that variation of media where I express myself can be of value and support a development of confidence in a different way, or perhaps different direction, than it would have been if there were only one media. Probably this is true for other people too.

I am still wondering about the issue of knowledge cultures. I do not think that we in the SIG are from that different knowledge cultures, even though we are from different countries. I felt a bit frustrated over the fact that so much time had to (?) be assigned to learning to use and act in Active Worlds, showing each other/ telling each other how to do things, instead of moving up a level, and do knowledge sharing at a more abstract level.

When it comes to my own learning, I can see that I learned a lot in the beginning, when it comes to how to actually manage an Avatar and building in Active Worlds. However, since this was not my main aim, I got frustrated and felt that there was a hidden agenda that I had no access to – we did not share the same aim. In other words, I was reminded about the importance of having a clear common aim at the start of a collaborative process. At the end, I do think that this was a very valuable experience. Frustration is sometimes a very powerful learning tool!" (Klara Bolander)

”DIFFERENT LOCATIONS”

This narrative is a personal inquiry of location, presence, attention and breakdown of conventions. It also points at how time and place influence reflection and awareness in a simultaneous process of presence and virtual distance.

“My initial experiences of the active world were amusing, exciting and frustrating. There was a rush of (virtual) sensation as I stepped out into the new space, bearing my new, carefully chosen name, dressed as the default stocky, tourist in Bermuda shorts, sporting a camera round my neck. This did not feel like me – so I learned to change my appearance and become the elegant woman I can only dream of being outside of Agora. I learned to dance (albeit the Macarena), wave, shout and cavort around the screen, climb up steps and walk through bushes (if I pressed the shift key).

Office setting: attention and presence

Invariably, I would arrive late for a virtual meeting in the Agora. As I entered the scene, the others would be saying their good-byes or retreating to build their own corner of the world, leaving me free to explore on my own. My presence in the office became virtual, the conversations around me in the shared office flowed like background music. My concentration was channeled in one direction until the phone would ring next to me and I would lurch back into my everyday work setting, pausing in mid-air on screen whilst I handled a call and then diving back into the screen to continue my line of inquiry in Agora.

Learning Lab setting: collocation

Like a group of students, we were inducted into the theory behind the constructed world. This gave us some notions before we began our learning explorations as to why we were to throw ourselves at heavily textured walls to see what we might encounter. The space was cramped and I felt the need to break out of the constraining and disorienting world that had been constructed by others to shape my knowledge-building environment.

We were given rules of conduct and a task to perform. Dutifully I set out to be the model student and take the stage to make a point, retreat once the point is made to allow for others to step up and respond. This was the plan. In Agora, I was surrounded by my fellow avatars, unsure of the identities of each, and unable to match the personifications on screen to the other participants in the room. However, something was not right in the Agora. Each comment made by one particular participant was instantly met with a cutting remark from another. There was someone in our midst who was playing foul. In the Agora I commented on the topic in hand, and was subject to the same abuse from the renegade avatar. My beautiful pseudonym “Parity” was regurgitated as “pariah” and I was firmly put down. Others were similarly renamed and suffered disparaging remarks from the avatar in question. What was going on? Over the screen came a “whisper” from a more collegial avatar – “how can we stop this rogue nonsense?” and I attempted to whisper back (message never received). My perception of the distress levels within our virtual community was increasing. Constructive communication was breaking down. Our interactions deteriorated to fending off comments from the one individual in the space. I was engrossed in the scenario. Around us, video cameras were whirring, but I remained oblivious to this. My comment at the end of the session was that it was “not satisfactory, too much heckling” and I certainly felt a certain degree of discomfort with the session – for the first time in Agora. It was not until later on, when recounting what had happened to others, that I questioned why I had not turned to face the *provocateur* directly. The person was sitting in the same room, collocation both virtually and physically, and yet I existed for a while only in the virtual space, and allowed the virtual persona to dominate our precious time together in the Agora world”. (Frances Deepwell)

”FROM NOVICE TO SKILLED AVATAR”

The process from being a novice to becoming a more skilled user is reflected on in this narrative. It also describes knowledge sharing with regard to conventions, communication and collaboration in the AWEDU universe as such.

“I remember the times I started in new schools, new classes. The awareness of how everyone was looking or rather staring – the feeling of wanting to sink into the ground or just to disappear has more than once locked my actions. This same feeling came when meeting other avatars for the first time in the Educational Active Worlds, only this time it really was possible to sink into the ground and the urge to do so was very strong.

If I had not been with a colleague from Learning Lab Denmark (LLD) exploring the different worlds on my first visit, I believe this is exactly what I would have done several times, before getting the courage to speak. But

together we stayed and actually started to follow people or rather avatars around, an action which in the real world would be considered quite rude and which I now - with the knowledge I have of behaviour in the virtual world - can see was rude in this world too! But none the less we followed some of the avatars around to see how they navigated and to see how they reacted to us. One avatar tried to get us of his/her tail, but knowing how to go through walls, we could continue to follow him/her, until we suddenly became aware of our behaviour. The following feeling of embarrassment finally urged us to write. So we spoke for the first time simply to apology for our obtrusiveness and to explain our reason for being in the world. We received immediate and even a friendly one, which encouraged us to continue our conversation now that we finally had started it. After this session I was so much more confident, the uncertainty about how to communicate, build, etc. was still there for a long time, but the feeling of unfamiliarity was gone, and I was much more at ease when moving around and felt confident when meeting avatars.

From the beginning I was very focused on being able to communicate in the AW and I found that many of the unspoken rules of face-2-face communication became explicit in AW as communication can not function in the same way. The lack of facial expressions, body language not to mention voices and the tone of these as well as hearing who is speaking and knowing when it is possible to interrupt – all of these communication conventions were missing in the AW. When touring around the worlds on these first visits, I met several avatars who I approached in order to learn more in the AW, mostly about features and building options.

1. "Rob": cool...great...amazing

But it was through these conversations I learned ways to get around these communication constraints. The example in figure 1 shows how by dividing sentences up on several lines, the continuity of the sentence is visible and moreover it reduces people speaking at the same time. Also by using a person's name and thereby specifically addressing one's sentences, it is possible to "see" who is speaking to who. The example also shows that knowledge sharing about how to communicate is gained implicitly in the interaction itself.

During my time in AW I was struck by how the visual environment and the movements of the avatars fascinated me in the beginning. After having spent the first sessions in AW, my vision was very much influenced by AW and often when looking out a window or looking at people in either a conversation or just observing them, my view of their faces or the landscape changed into AW looks and movements. My colleague and I had a grand time moving and speaking in avatar mode. But as time went on my need for using movements, looking at other avatars' movements as well as my surroundings became less and less. As the movements of the avatar had no purpose in the communication and the surroundings never provided any kind of interaction, my attention was more focused on the chat and on the purpose of being in AW, namely building and working together. And so the interaction with other avatars became much more purposeful as the example in figure 2 shows. My colleague and I are much more direct in our questioning. We have a goal and we need answers to our questions and so knowledge sharing seems to be explicit in interaction.

10. Rich: because i have object select disabled, just a second

When moving around the different worlds I met many people, and what struck me was the ease everyone I met had about being anonymous. I did not feel any urge to find out who people were and nobody asked me any personal questions. The communication was surprisingly easy and free not having any restrictions or rather reservations and prejudice to the person I was talking with". (Sanne Fejfer Olsen)

CONCLUSION

In our sessions collaboration was mediated in different media, settings and locations: F2F workshops, net-based avatar meetings, text-based net sessions and also collocation in a computer lab while acting "out there" in a virtual distance. This multiplicity of mediations is commented on in one of the narratives: "*that variation of media where I express myself can be of value and support a development of confidence in a different way, or perhaps different direction, than it would have been if there were only one media*" ("My learning process"). Different media might thus open up the possibility to see more facets of oneself in social interaction; we will describe this as "a multiplicity of mediations". Moreover, this multiplicity might help reflect more facets of one's self-presentation, reflection and response in social interaction and thus also new understandings and new lines of action. When looked at in this way we will conclude this paper by suggesting the concept of "multi-faceted interaction" to denote interrelations between a multiplicity of mediations and different facets of self-consciousness in social interaction. It is worth researching further into these interrelations to get to know more about knowledge sharing with avatars.

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