Simeon say, "Our next presenter will bring us back "inside" the virtual worlds"

-- Mary shows slide 1 on SM-carousel --

**Two Approaches to a Virtual Design Office**

| Designing in a Virtual Office | Designing in the Design |

Mary says, "This presentation is a result of a project by Simeon, myself, Ning Gu, and Kok Lau"

BruceD says, "yup an old view of alphaworld?"

Mary says, "I will be doing the presentation, with Simeon's help"

Mary [to BruceD]: not alpha world, but it is active worlds

Mary says, "I encourage interruptions"

Mary says, "rather than a quiet presentation"

JohnM says, "who is Olive?"

Mary says, "ready?"

BruceT nods

Mary [to JohnM]: Olive is the name that Kok uses

Mary says, "one of the authors"

Mary says, "The idea of a virtual design office can have two meanings. The typical approach in a virtual design
A studio project is to create an online environment for collaboration. We call this a virtual design office.

Mary says, "A second approach is to design within the design, modelling and collaborating in a 3D place."

Mary says, "In this presentation we will explore both approaches."

Mary says, "the left image -"

Mary says, "using an office environment to design"

Mary says, "the right image - working inside the design"

-- Mary shows slide 2 on SM-carousel --

**Virtual Architecture**

![Virtual Architecture Diagram]

Mary says, "Our work is influenced by the concept of virtual architecture - where networked environments and spatial visualisation come together."

Mary says, "Virtual architecture provides both a metaphor for the design of online environments and a set of design techniques, theories, etc."

Mary says, "The results of this confluence of ideas can be: virtual worlds, virtual spaces, virtual buildings."

-- Mary shows slide 3 on SM-carousel --
Designing the Virtual Office

As a fully functional online environment for designers, a virtual office should support both individual designs and collaborative projects. The office should be able to host online meetings and presentations for clients and team members.

Mary says, "When designing the virtual office we considered the purpose and the ambience of place. Our design would not be very functional in a physical office building, but can be functional in a virtual world."

Mary says, "There are several functional areas of the office: entrance, meeting place, private working area, access to tools and storage, and entertainment. Movement from one kind of task to another changes the view of the place."

Mary says, "this office has been implemented in a MOO environment"

Mary says, "in which you can program functionality beyond the visualisation"

Mary says, "so - a shelf holds things, a room can be represented explicitly"

Mary says, "this means you can have things that do not have a physical counterpart"

-- Mary shows slide 4 on SM-carousel --
Virtual Walls in a 3D Virtual Office

The purposes of the walls include: security, privacy, and a place to put things. Inspiration for the design of the walls is from the Neo-Plasticist Paintings by Mondrian. Straight lines and primary color. The walls are not solid, reflecting that the material properties of the walls are not relevant to their behaviour.

Mary says, "For an example of the differences between a virtual and physical office we consider the design of the walls. The walls can provide security and privacy without being solid. The functions are programmed, and not a direct response from the 3D model."

Mary says, "We designed the walls as frames for putting things. Each block is a tool or storage device."

-- Mary shows slide 5 on SM-carousel --

Virtual Walls in a 3D Virtual Office

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Mary says, "In contrast to an office, where you simulate an office experience, our second approach is an environment that simulates the design site."

Mary says, "Here, the designer models and collaborates with other members of the team."

Mary says, "We have been using Active Worlds. The various designs become the current design office."

BruceT says, "Is this immersive?"

Mary says, "you are in the virtual world, but it is on the screen"

Mary says, "you are represented by an avatar"

Mary says, "no headsets or glasses"

-- Mary shows slide 6 on SM-carousel --

**Discussion**

1. The role of Architectural Design in online environments
2. The needs of designers in virtual worlds
3. Supporting collaboration and designing at the same time

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Mary says, "we can go back to the images as needed, but"

Mary says, "I wanted to open a discussion now"

Mary says, "there are three possible ideas to explore:"

Mary says, "The role of Architectural Design in online environments - should online environments look like physical. We suggest that architectural design offers an intuitive understanding of place in an online environment."

Mary says, "The needs of designers in virtual worlds - do current virtual worlds provide the functionality needed by designers?"

Mary says, "Supporting collaboration and designing at the same time - can the two approaches of an office and a design site be merged in one environment?"

Mary says, "now your turn"

BruceT says, "I would say you need larger screens and better input devices."

Mary says, "of course we could always have better technology"

Mary says, "but what about the concepts?"

Simeon say, "and their meaning"
Simeon say, "and interpretation"

Suhail says, "let me ask you if you feel that its possible for many designers to sharing there ideas togther through this technology..."

Mary [to Suhail]: which one?

Mary says, "the virtual office"

JohnM says, "it seems that creating the collaborative environment is a better path than sharing a design model"

Mary says, "the virtual design site?"

Suhail says, "you Mary ..;-)"

JohnM says, "a way to work maybe to be to devlop part models offline and upload"

RikS [to Mary]: do you know of parallels in other disciplines, I think the virtual work- and meeting place needs not to be restricted to design only.

Simeon start writing on Whiteboard.

Mary [to JohnM]: the problem in woring in the model itself is:

Mary says, "a 3D model has no concept of a room or empty space"

Mary says, "space"

Simeon finish writing on Whiteboard and put the pen down.

Mary says, "yet that is what architects are designing"

Mary [to RikS]: I agree - this is not limited to design

osantos says, "I think you need not only functionality, you also need to feel confortable in the virtual space"

TerenceL says, "I like the Mondrian :-) 'intuition', 'ambience' and Mondrian imply some strong affective processes..."

Mary [to RikS]: but designing has an additional need - to see the object being designed

JohnM says, "new versions of ArchiCAD and Autocad all support space 3D concepts"

Simeon [to ]: RikS

Simeon [to RikS]: oops, part of the design is the comfort ...  

Urs says, "I enjoyed being in eduverse very much last night, still, I wonder why all those worlds look so much like playgrounds. Is that on purpose?"

Mary [to JohnM]: but 3D models tend to model the physical components of the design

osantos says, "WHen you are working in a virtual space you want to be in a real enviroment"

Mary [to Urs]: good point, they don't look very real -- more like toys
JohnM says, "currently true but will change "
osantos says, "you want real elements, you want to interact with the elements"
Simeon [to Urs]: well the geometry world was not that gamish
JohnM says, "the Active World lookjs like a game because they are not architects"
osantos says, "you want to be part of the design"
BruceD says, "yes there are a whole generation of new platforms coming"
BruceD says, "will change the design space significantly"
Urs says, "the colors, the textures... yes they were"
EmiliaC says, "don't you think that current hardware and software -and maybe people- limitations are still handicapping a real activity of designing in the design?"
RikS [to osantos]: when virtual worlds become common place they will just be like virtual worlds, whatever reality that is (like dreams)
Simeon start writing on Whiteboard.
Mary [to EmiliaC]: yes, there are still limitations to designing in the design, but are the limits just technology? or do we need to rethink the concepts
Simeon finish writing on Whiteboard and put the pen down.
JeffreyH says, "Mary&Simeon, I really enjoyed the presentation. Have you conducted any study of the access efficiency of 3d worlds? Do the high efforts of building the 3D world plus the suboptimal information/bytes ratio not outweigh the benefits? "
Mary says, "I agree with RikS that virtual worlds will become their own reality"
Mary says, "but at this point, we need a metaphor"
JohnM says, "JohnM thinks that the collaborative environment is potenisally more fruitful,..."
Simeon say, "I think EmiliaC question gives partly an answer to Urs remark why they look like games ..."
JohnM says, "consider the notion of smart walls and other objects that support better collaboration?"
Mary [to JeffreyH]: there is a large effort in building the 3D world, but that effort is necessary in any building design modelling
Urs says, "I said playgrounds - games don't look like that anymore, actually
:-)"
Suhail says, ""I think both of them should go togther (Concept+Technology)"
JohnM says, "DavidM thinks collaboration in the design has more potential"
Mary [to JohnM]: smart walls are a good idea, then there is a separation of the virtual building as a functional building and a virtual building as a simulation
Simeon [to JohnM]: + physical smart walls with sensors, etc. ...

Mary [to Urs]: recent games look as real as the physical world

Mary says, "yet we don’t see that level of technology in the professional use of 3D models"

JohnM says, "eg Riven"

Urs says, "you could have rooms that shrink and grow with the number of people in them"

Urs says, "I'm not advocating realism..."

JohnM says, "nad get resources automatically based in the purpose or role of participants"

Simeon [to Urs]: variety of possible functionality

BruceT [to Urs]: "Good point, you should take advantage of the fact it is not a real world"

BruceD says, "mike heim of art center in pasadena ca has written a great book on "virtual realism""

Simeon say, "Well we have one more presenter who I am sure is eagerly waiting for the podium"

JohnM agree strongly