

# Real Virtuality

## Immersion and Perception of Virtual Architecture in Multi-User Virtual Environments

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Architects in Virtual Reality.

The real world - just another window!

God or Ego?

Interface - how old are you? - PLAY

Going virtual:

Instruction 1: ontological –

Architecture\_Engine\_1.0

Instruction 2: architectural consciousness –

Archdiploma2007

Instruction 3: open the virtual door

Instruction 4: parameter value!

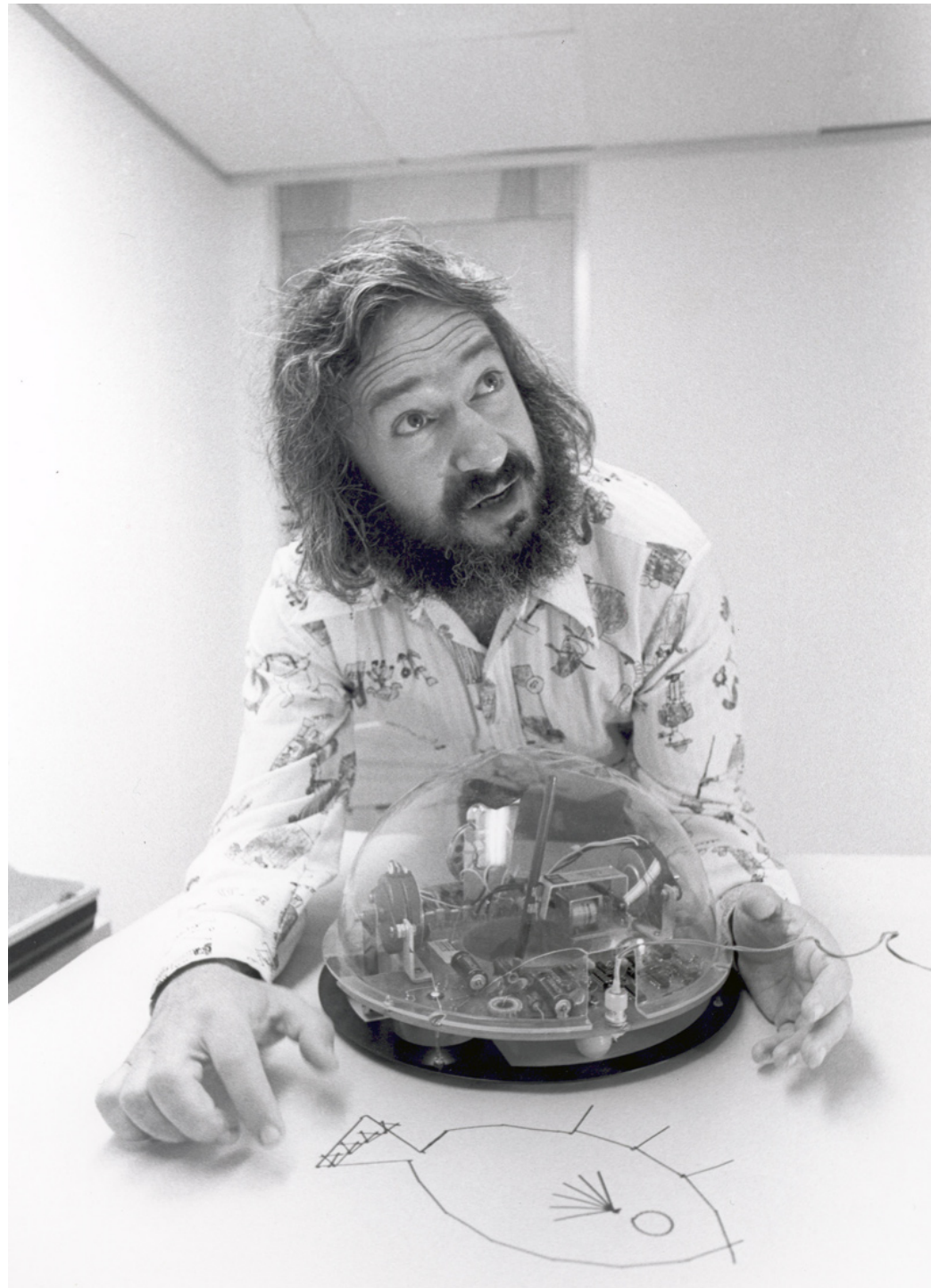






Catalogue published for the exhibition *Software, Information Technology: Its New Meaning for Art*, New York: Jewish Museum, 1970.

Installation SEEK von Nicholas Negroponte und der Architecture Machine Group am MIT, 1969–70,

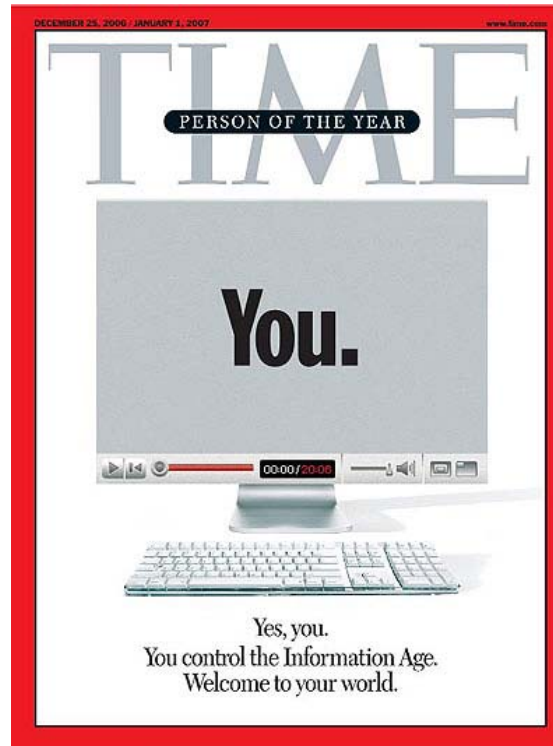




Das binäre Haus existiert nur in der CPU.  
Binäre Striche sind inhaltsentleert.  
Das binäre Haus selbst hat keine Dimension.  
Das binäre Haus ist gegenstandslose, entmaterialisierte Architektur.  
Ein binäres Haus ist baubar.

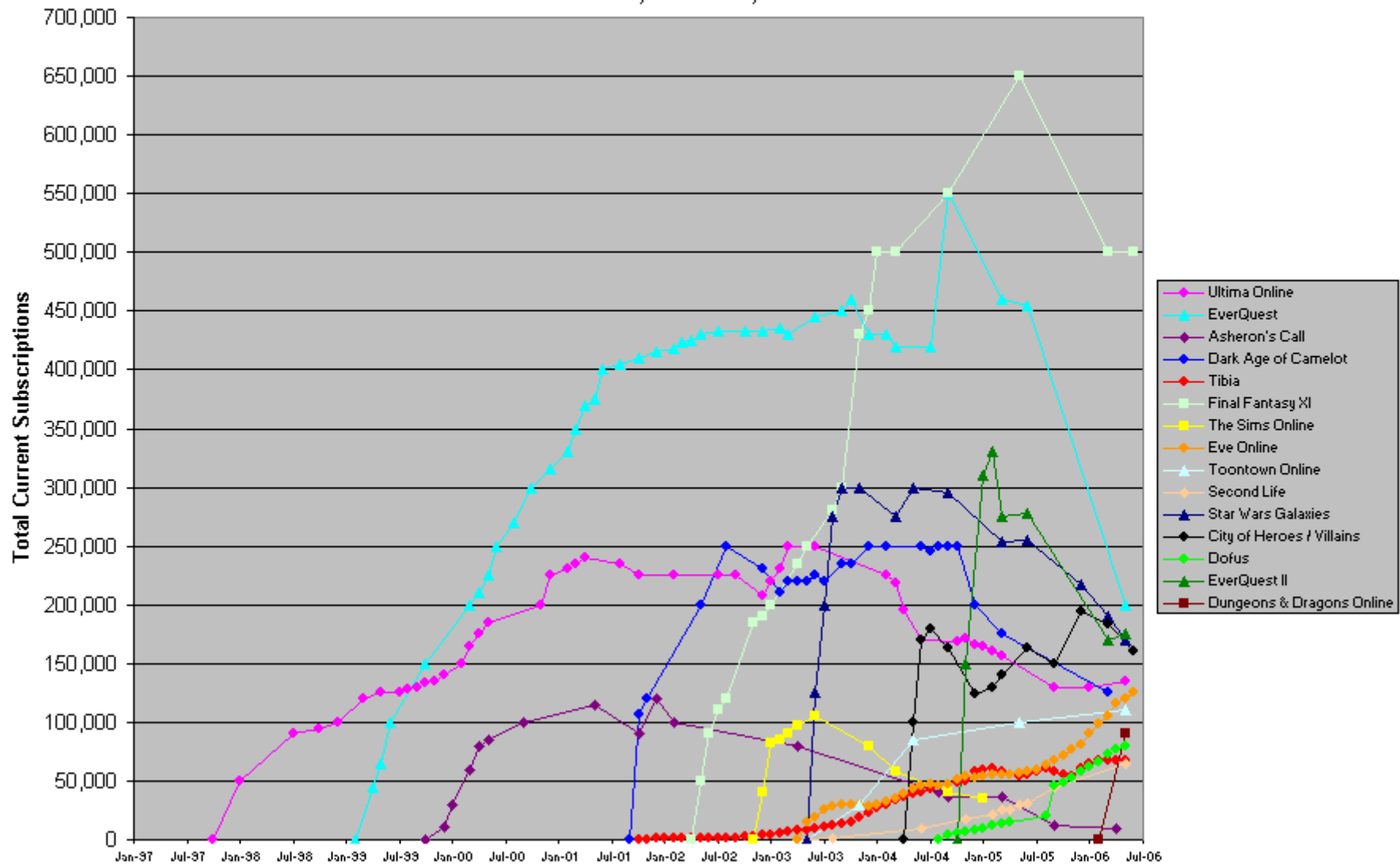
...

Das binäre Haus 1987 – Manfred Wolff-Plottegg





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# Anshe Chung's *Dreamland*

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 DREAMLAND Furries	 DREAMLAND Island living	 DREAMLAND Residential



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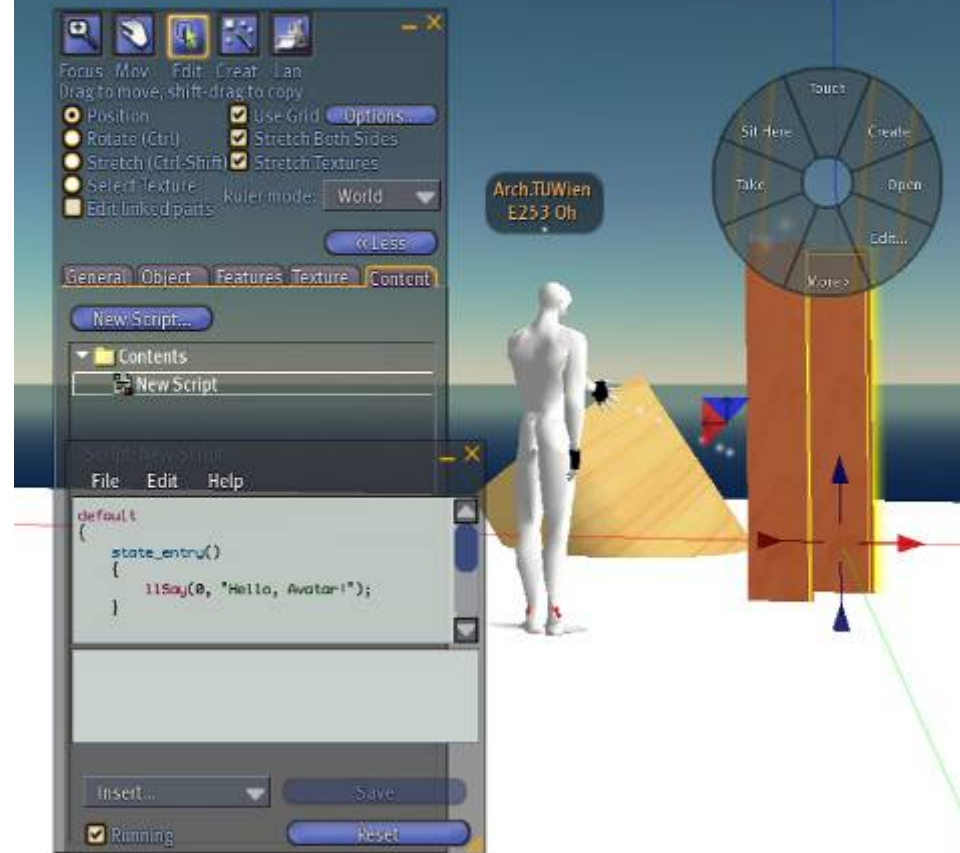
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**HELP!**

X: 77.201 Y: 247.997 Z: 26.847

# SECOND LIFE - Architecture 2.0

250.333 Entwerfen WS 07 / 4h



Manfred Wolff-Plottegg, Jochen Hoog  
Institut für Architektur und Entwerfen Abt. Gebäudelehre

# SCRIPTING ARCHITECTURE

ENTWERFEN SS/08

Anmeldung über TUWIS ++ 4 std

Betreuer: Manfred Wolff-Plottegg, Jochen Hoog

Einführung 06.03.2008 09:00-13:00 SR2

Pseudocode = Entwurfskonzept // Programmcode = Entwurf // „Running“ Code = Produkt

Einführung in die Grundlagen der Programmierung: Multi Agenten Systeme, Cellular Automata, Swarms and Flocks, Evolutionary Programming, Neural Networks, L-Systems, responsive and interactive architecture, parametric design and generative design.

[www.gbl.tuwien.ac.at](http://www.gbl.tuwien.ac.at)

# Prototype Remote Operation Interface

The screenshot displays a complex remote operation interface with several key components:

- Videoconferencing tools:** Located in the top-left, it features a video feed of a person and various control buttons for audio and video.
- Hardware Setup:** A central panel with numerous icons representing different hardware components and their configurations.
- Status Displays:** A top-right section containing several small monitors showing system metrics and status indicators.
- Labview (experiment control):** A large central window showing a graphical user interface for an experiment. It includes a plot area with a white waveform and a blue horizontal line, and a control panel with various knobs, sliders, and buttons.
- Virtual Notebook System:** A bottom-right window with a toolbar and a main area containing a small image of a notebook and the text "Virtual Notebook System".

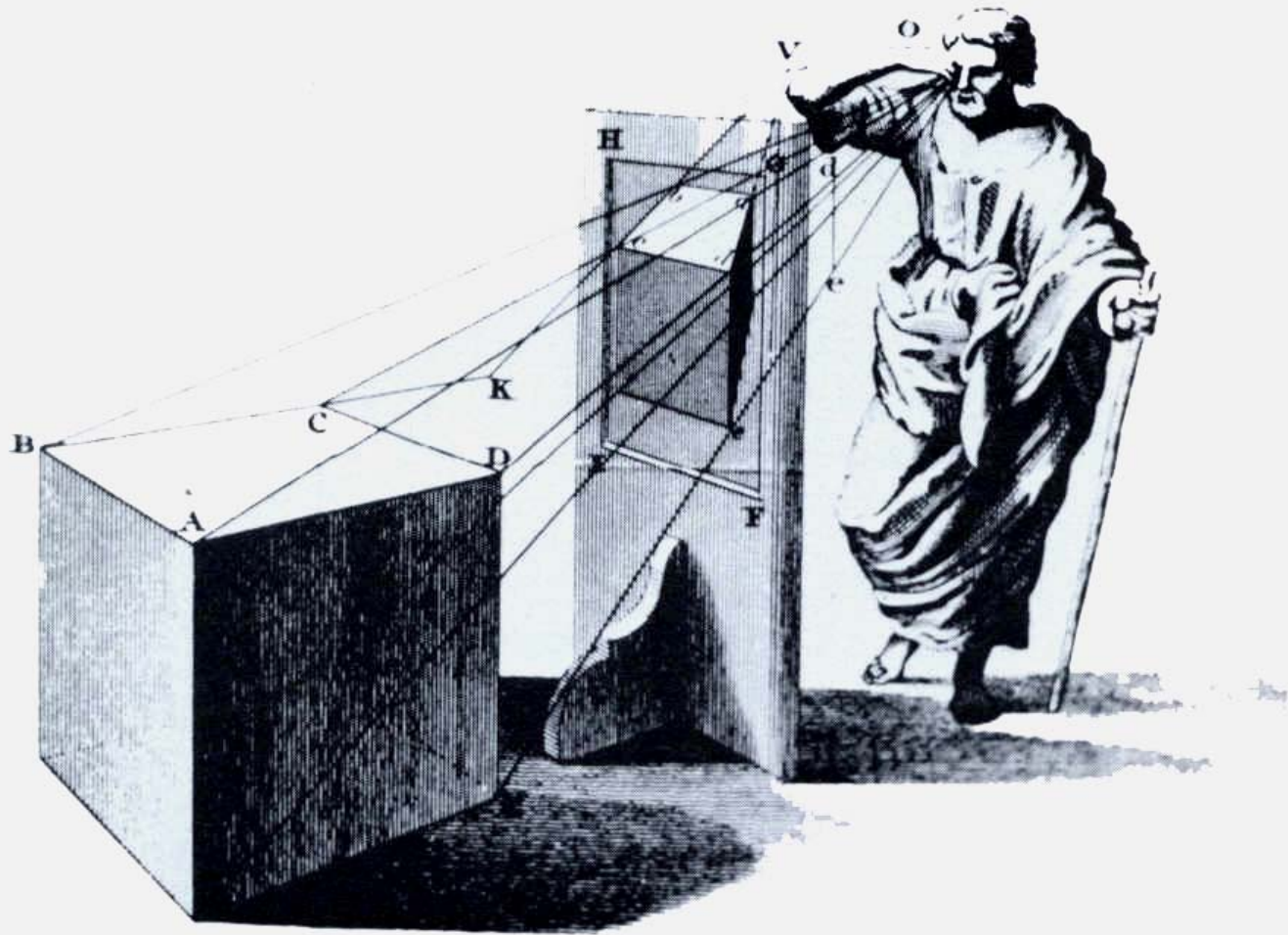
At the bottom of the Labview window, the text "Labview (experiment output)" is visible.

## Virtual Environments in Clinical Psychology and Neuroscience

*Methods and Techniques in  
Advanced Patient-Therapist Interaction*



Editors: G. Riva  
B.K. Wiederhold  
E. Molinari



The visual cone, from B. Taylor, *New Principles of Linear Perspective* (1715).







**Instruction 1:  
ontological – Architecture\_Engine\_1.0**

PC  
CD

PC CD-ROM

ARCHITECTURE\_ENGINE\_1.0

ARCHITECTURE\_ENGINE\_1.0

Spielbare Version der  
ARCHITECTURE\_ENGINE\_1.0

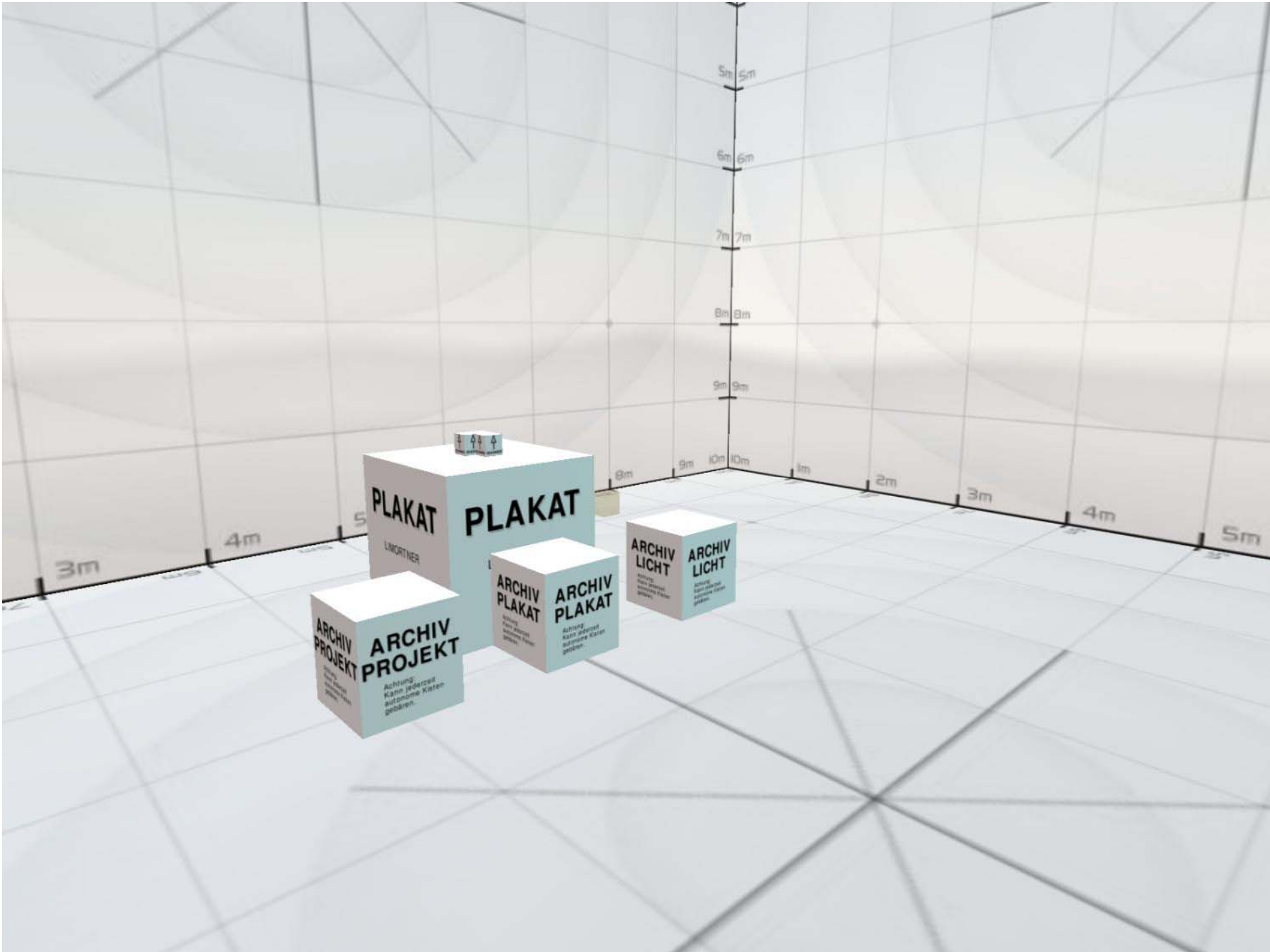
Film über die  
ARCHITECTURE\_ENGINE\_1.0



film: archtiecture\_engine\_1.0

**Instruction 2:  
architectural consciousness –  
Archdiploma2007**

film: archdiploma2007



**ARCHIV PROJEKT**  
Achtung:  
Kann jederzeit  
autonome Kisten  
geben.

**ARCHIV PLAKAT**  
Achtung:  
Kann jederzeit  
autonome Kisten  
geben.

**PLAKAT**  
LWORTNER

**ARCHIV LICHT**  
Achtung:  
Kann jederzeit  
autonome Kisten  
geben.

**ARCHIV LICHT**  
Achtung:  
Kann jederzeit  
autonome Kisten  
geben.



```
Script: ConstructOrange (Initial)
Description: 2007-06-01 19:25:13 Isl2 script
File Edit Help

integer ARCHIVECHAN = -19801115;
string optBuild = "Build";
string optClean = "Clean";

string optStart = "START";

integer PRINCHAN = -19730611;
integer MENU_CHANNEL = -69022;
integer MENU_HANDLE;

integer gbBuilt = FALSE;
integer gbVisitor = TRUE;

default
{
    state_entry()
    {
        //!!MessageLinked(LINK_THIS , 0, optStart, "");
    }

    link_message(integer piSender, integer piNum, string
    pstrMessage, key pKey)
    {
        if (pstrMessage == optStart) {
            !!SetTimerEvent(5);
        }

        if (gbBuilt) {
            if (pstrMessage == "VISITOR") {
                gbVisitor = TRUE;
            } else if (pstrMessage == "NO_VISITOR") {
                gbVisitor = FALSE;
            }
        }
    }

    timer() {
        //Here we moving?
        if (gbBuilt)
        {
            if (!gbVisitor) {
                !!MessageLinked(LINK_THIS , 0, optClean, "");
                gbBuilt = FALSE;
                !!RegionSay(ARCHIVECHAN, "KILLING");
                //!!Shout(0, "KILLING");
                !!Sleep(5);
                !!Die();
                !!SetTimerEvent(10);
            }
        }
        else {
            !!SetTimerEvent((integer)!!FrRnd(30.0)+30);
        }
    }
};
```

```
Script: ConstructOrange (Kisten)
Description: Kisten-Bootup-Script for ConstructOrange
File Edit Help

float gfTiserInterval = 0.25;
integer ARCHIVECHAN = -19801115;
integer KIISTENCHAN = -19801116;

string optStart = "START";

string optBuild = "Build";
string optClean = "Clean";
vector gvOffset;
rotation grRotation;
integer gbNeedMove;
vector gvDestPos;
rotation grDestRot;
integer gbRecorded = FALSE;

integer LISTEN_HANDLE;
integer giSyncID = 1; // NULL
integer gbVisitor = FALSE;
integer giFailCount = 0;

////////////////////////////////////
string first_word(string In_String, string Token)
{
    if(Token == "") Token = " ";
    integer pos = !!SubStringIndex(In_String, Token);

    //Found it?
    if( pos >= 1 )
        return !!GetSubString(In_String, 0, pos - 1);
    else
        return In_String;
}

////////////////////////////////////
string other_words(string In_String, string Token)
{
    if( Token == "" ) Token = " ";

    integer pos = !!SubStringIndex(In_String, Token);

    //Found it?
    if( pos >= 1 )
        return !!GetSubString(In_String, pos + 1, !!StringLength(In_S
ring));
    else
        return "";
}

////////////////////////////////////
gotoRandom()
{
    if( !gbNeedMove )
    {
        !!SetTimerEvent(gfTiserInterval);
        gbNeedMove = TRUE;
    }

    return;
}

////////////////////////////////////
```

```
Script: ConstructOrange (The Base)
Description: The Base-Script for ConstructOrange
File Edit Help

announce_moved()
{
    if ( !!GetCreator() == !!GetOwner() ) {
        !!RegionSay(PRINCHAN, "MOVE" + "|" + (string)giSyncID + " " +
!!DumpList2String( [ !!GetPos(), !!GetRot() ], "|" ));
        !!ResetTime();
        vLastPos = !!GetPos();
        rLastRot = !!GetRot();
        return;
    }
}

default {
    //////////////////////////////////////
    changed(integer change) {
        //!!Say(0, "CHANGED? c001!");
        if(change & CHANGED_OWNER) {
            //!!Say(0, "CHANGED!!! HORRORRRR!!!! AAAAAAAAAAAAAA!");
            !!ResetScript();
        }
    }

    //////////////////////////////////////
    state_entry () {
        vLastPos = !!GetPos();
        rLastRot = !!GetRot();

        //MENU_HANDLE = !!Listen(MENU_CHANNEL, "", "", "");
        // PRINCHAN = (integer)!!FrRnd(-100000.0);

        giSyncID = (integer)!!FrRnd(-100000.0);
    }

    //////////////////////////////////////
    touch_start (integer total_number) {
        group = !!DetectedGroup(0);
        agent = !!DetectedKey(0);
        objectowner = !!GetOwner();

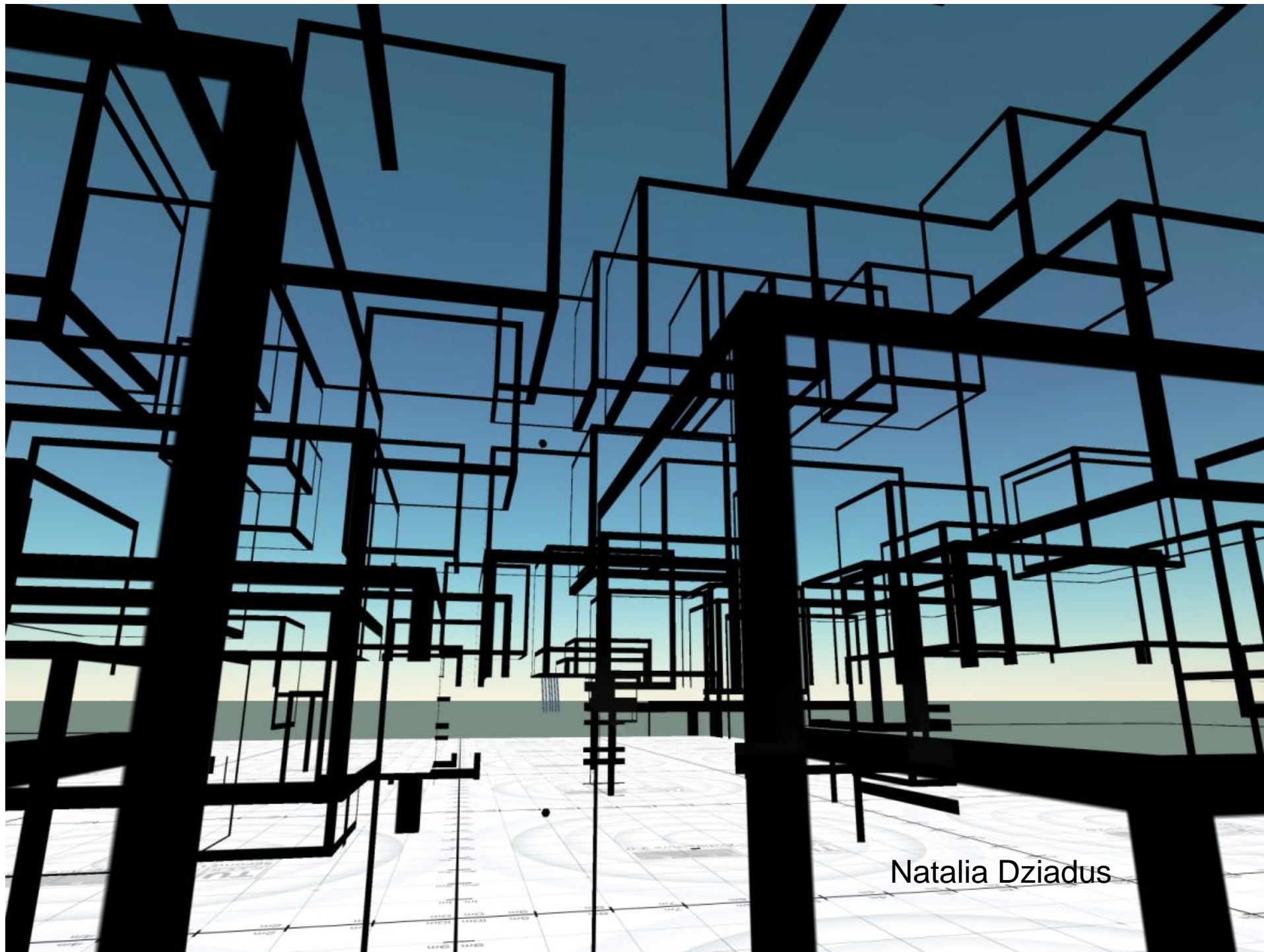
        if ( (objectowner == agent) || ( group && TRUE ) ) {
            !!RegionSay(PRINCHAN, "RECORD" + "|" + (string)giSyncID
+ " " + !!DumpList2String( [ !!GetPos(), !!GetRot() ], "|" ));
            !!SetTimerEvent(gfShoutRate);
        }
    }

    timer() {
        if( bMoving )
        {
            if( (!!GetRot() != rLastRot) || (!!GetPos() != vLastPos)
        {
            if( !!GetTime() > gfShoutRate ) {
                announce_moved();
            }
        }
    }
};
```

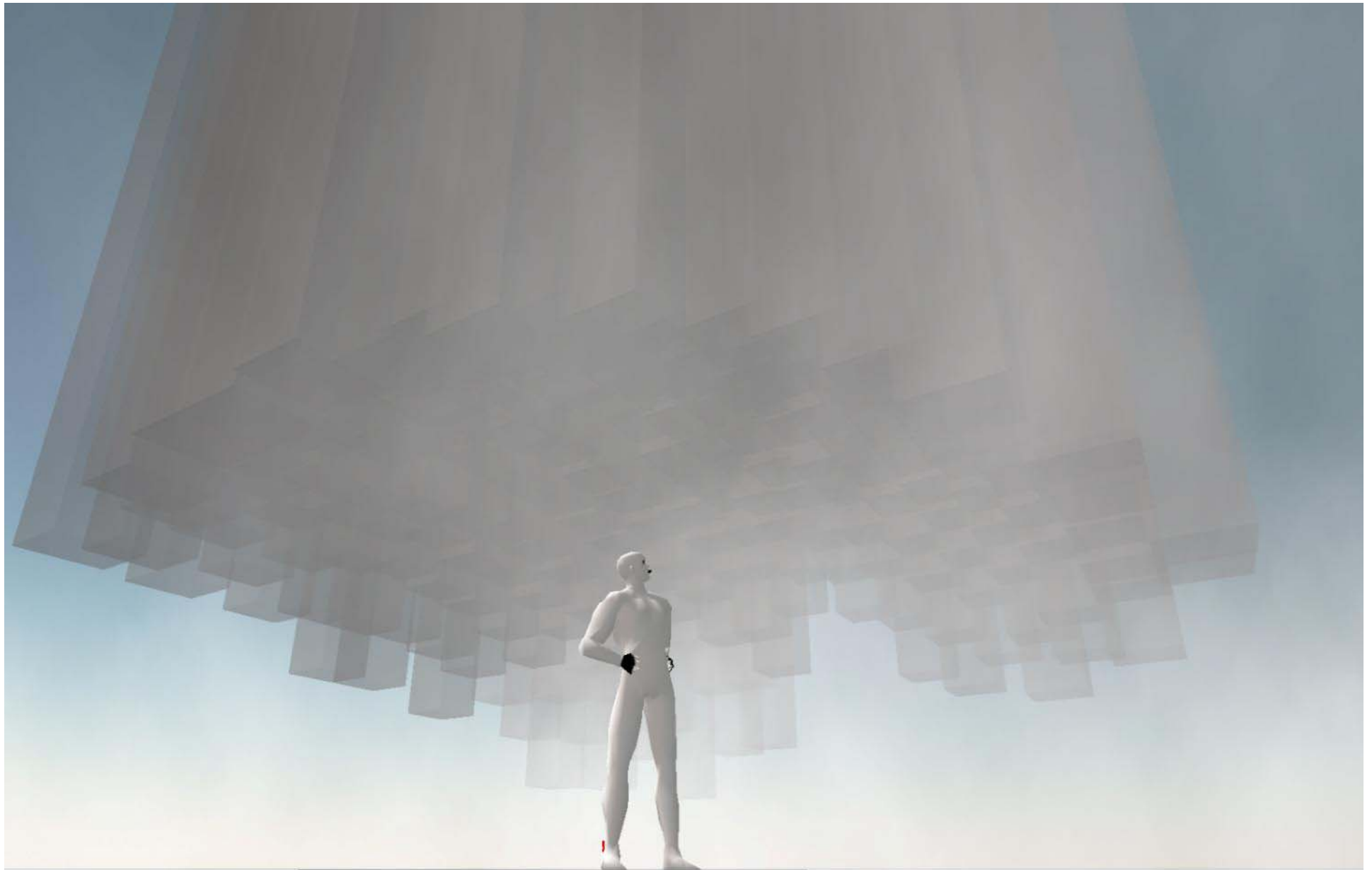
**Instruction 3:  
open the virtual door**

film: entwerfen

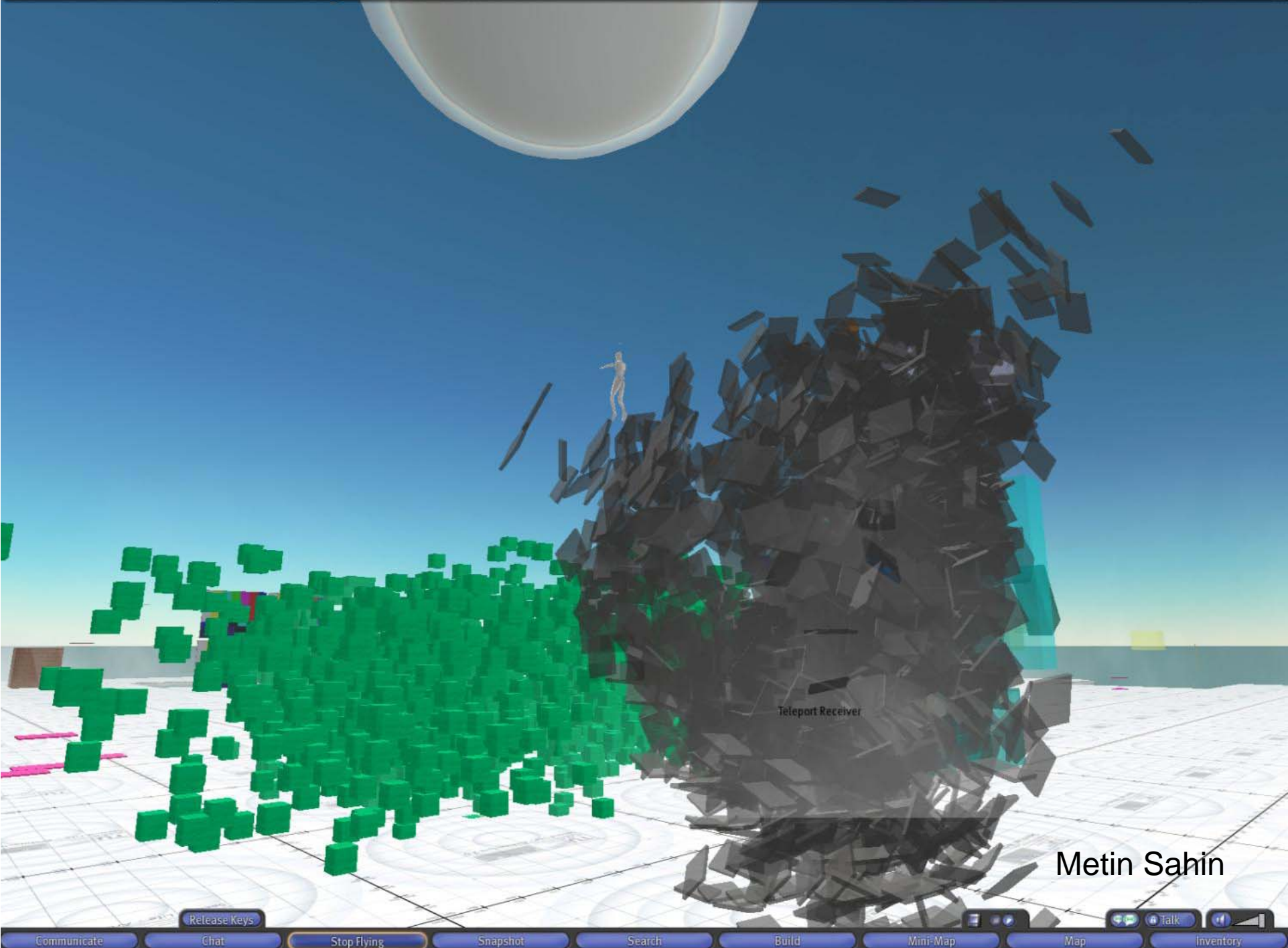
**Instruction 4:  
parameter value!**



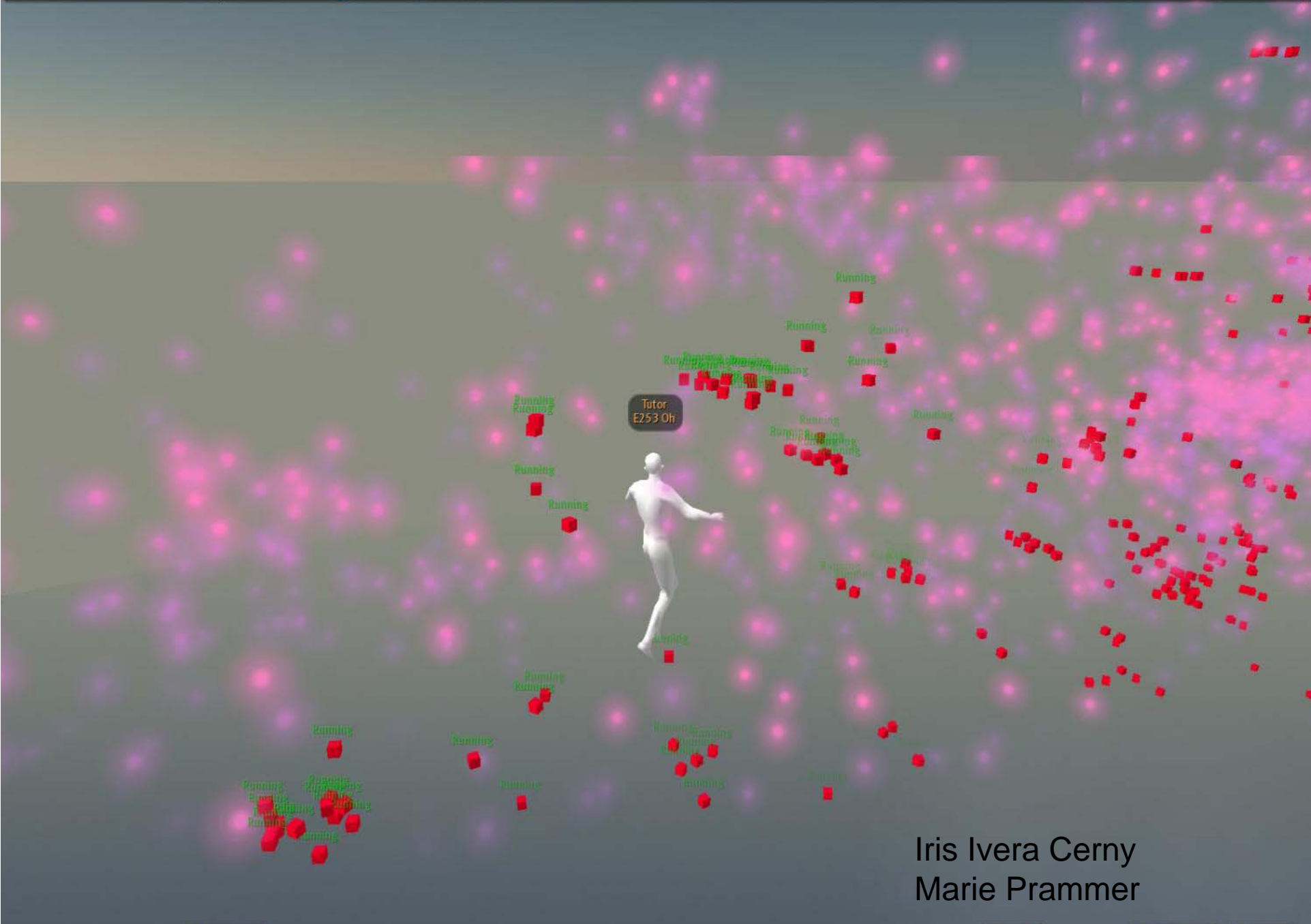
Natalia Dziadus



Lukas Antoni

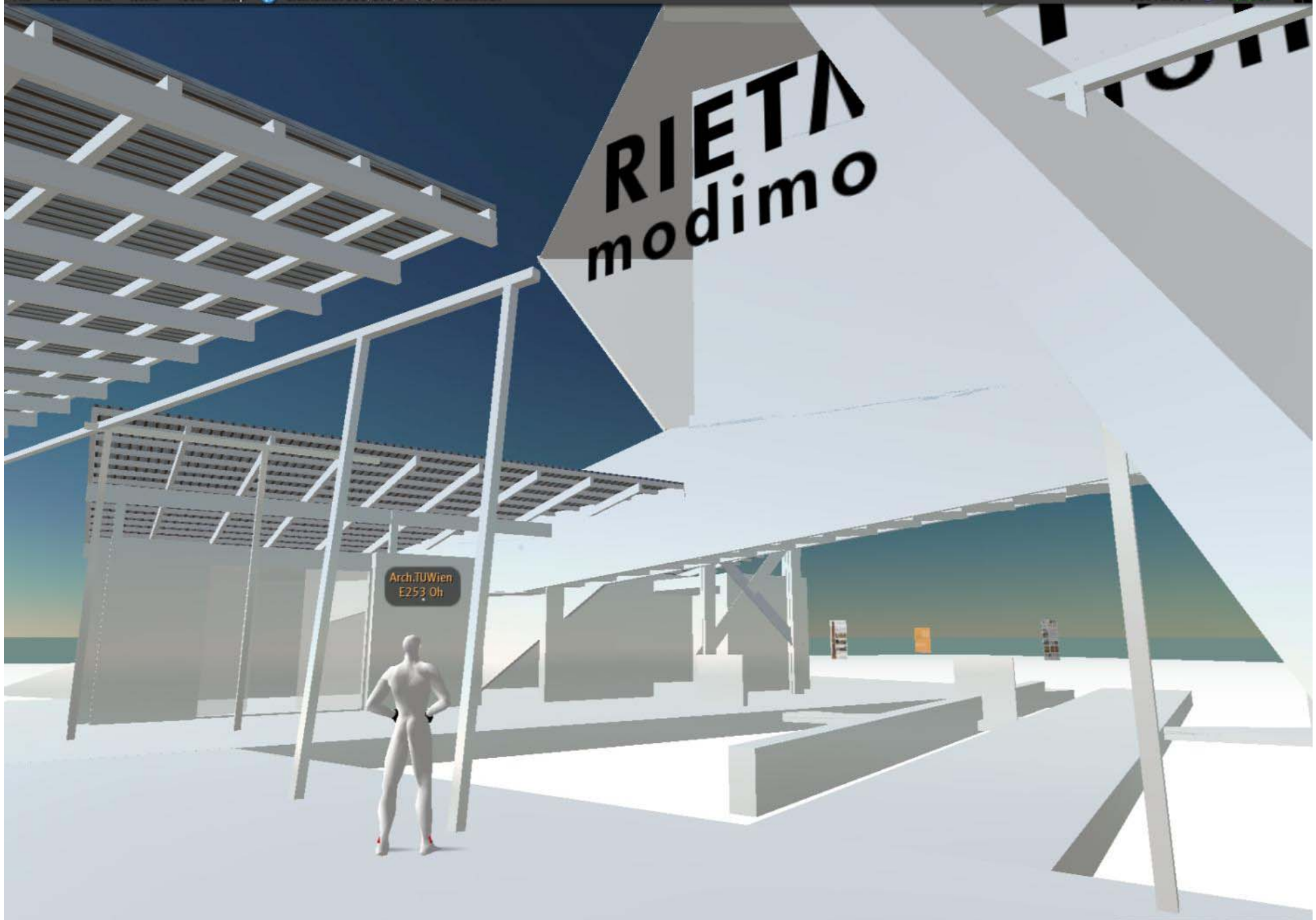


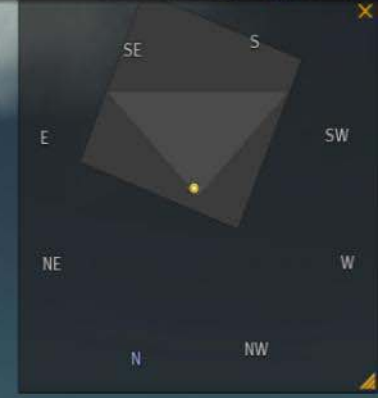
Metin Sahin



Iris Ivera Cerny  
Marie Prammer





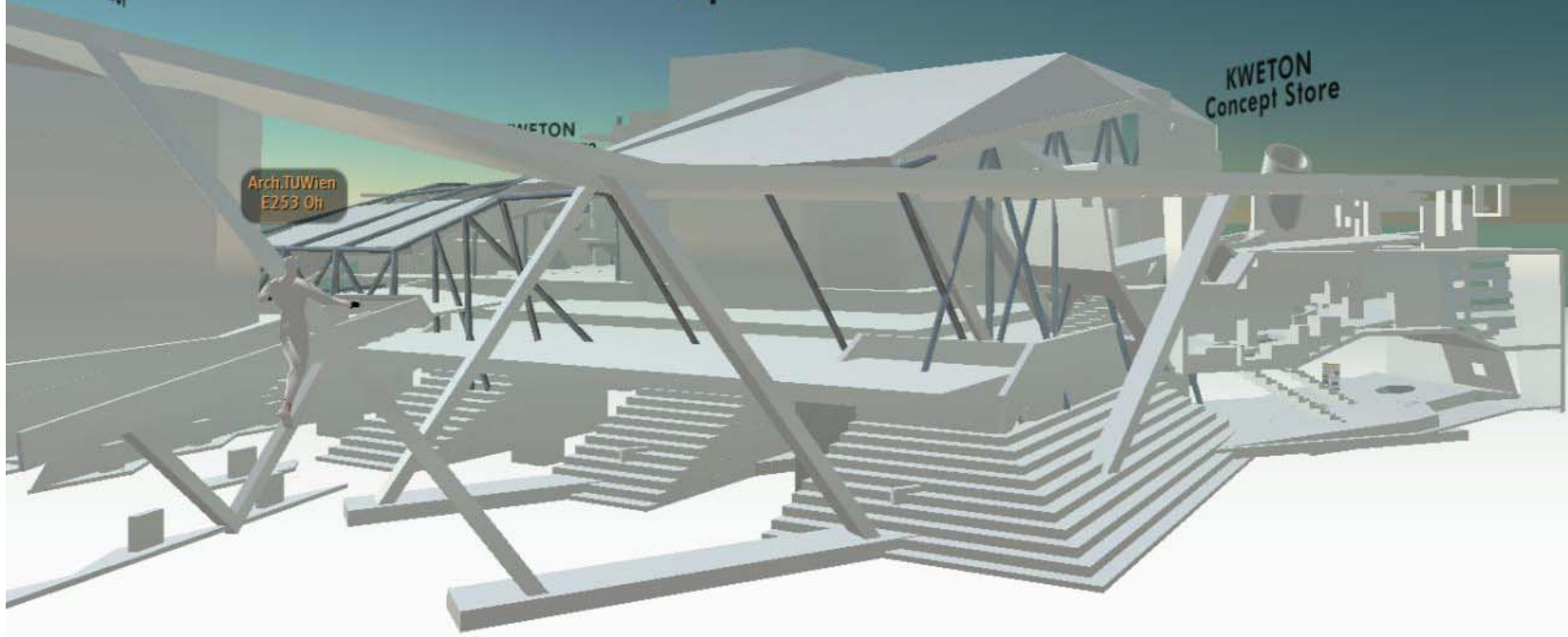


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k-pac

KWETON  
Concept Store

Arch.TUWien  
E253 Oh





Arch.TUWien  
E253 Oh

PixelBlock: Plakat Eis: got Build  
Plakat Eis: Got sync-ID:-56439

thank you

acknowledgement:

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