

Poetic Transformations

How inspiration from the past could innovate the future



Wireframe of *Le Poème Electronique*

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How inspiration from the past could innovate the future

This thesis is written as a final project report on recreating Le Poème Electronique and organizing the 50th anniversary celebration and round table discussion. It describes the full research-phase, the development phase and evaluation phase.

Commissioner

Philips Design (New Initiatives - Virtual Worlds)

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About Philips Design

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The result of the project can be found at

<http://slurl.com/secondlife/Philips/175/91/21>

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Preface

This report is written as an assignment for my graduation at ICT Media Design at Fontys Hogescholen in Eindhoven. Within my internship I teamed up with Dolf Wittkämper to take a virtual challenge which brought us into many different aspects of designing, organizing and exploring.



Challenge

I took the challenge to act as Fontys IMD ambassador by following up a successful student threesome within Philips Design. By showing my added value in this project to Philips Design, I showed them the value of multi-skilled designers from Fontys IMD.

Assignment

The assignment is formulated together with my internship coach at Philips, Dolf Wittkämper and reviewed by Eric Slaats. It is formulated to create a possibility for me to develop myself on multiple aspects and at the same time is of value for Philips Design.



Unexplored areas

This assignment is both innovative and challenging thanks to the fact that I'm going to set foot on unexplored areas for both Philips as well as myself. Nowadays the combination of reality and virtuality is still in its infancy. This project is the perfect opportunity to create an initiative for assisting this process towards augmented reality.

Acknowledgements

Hereby I would also like to take the opportunity to acknowledge some people who had an important role in the successful completion of my internship:

First I want to thank Dolf Wittkämper for his support, steering and feedback. You also gave me the trust, responsibility and freedom to work towards a great outcome. Second I want to thank Eric Slaats for his guidance and introduction at Philips Design. Finally I want to thank the people who had a great input within my internship: Jeanne de Bont, Mark Reijven, Slava Kozlov, Han le Blanc, Remco Visser and Henry Segerman.

I hope you will enjoy this thesis on Poetic Transformations,

Bart Reijven
Graduate at Philips Design







Executive summary

The history of this project begins at the 1958 World Exhibition in Brussels, by the opening of the Philips pavilion (better known as Le Poème Electronique), which is said to be the first multimedia spectacle in the world. Accomplished by a collaboration of the French architect Le Corbusier, his student Iannis Xenakis and the composer Edgard Varèse, this pavilion attracted more than 2 million visitors before it was deconstructed in 1959.

Because of this legendary happening 50 years ago, Philips has been searching for a proper way to celebrate Le Poème Electronique. While supporting other initiatives in the past, Philips was also looking for a more engaging way to remember this unique Expo-submission. At that point Dolf Wittkämper (department Research and Development) stepped in with the idea for expression through virtual space. At doing so, both time and money can be reduced to a minimum, compared to a celebration in real world. At the same time it offers the advantage to organize an international event and to explore virtual worlds.

While gaining inspiration out of Poème, a project group (consisting out of Philips Design, Foundation Alice and Creativ) strives to set up a new project that embraces co-creation within the architect- and design community. In 2009 a contest will be set up, which will build on Le Poème Electronique as an inspiration to engage into co-creation and exploring the future. The contest will be organized for architects/creatives focusing on collaboration and innovation towards a tangible multi sensorial business experience on Strijp-S location. The innovative submissions will explore the integration of the physical & the virtual and their interdependence, with special attention for immersive media and lighting.

Not all elements as described above are included in the internship. The internship assignment contains the concept

planning of the event and a preamble event towards the contest. Organizing the celebration event (with all the communication aspects included), building the environment and a virtual replica of the Philips pavilion are some of the activities that will be fulfilled. The main goal behind the celebration event is to take a look into the past and celebrate as well as learn from it. The event consists out of three elements. The first one is a presentation that will be given by Kees Tazelaar, who is well-known for his research after Le Poème Electronique. He will discuss the technology and story behind the project and open the virtual reconstruction of the Poème. The virtual reconstruction is the second element of the event. Within Second Life there will be a copy of the Poème, as realistic as possible. It will not contain the full 8-minute show, but only a segment of it, which will take around 2 minutes.

As preamble towards the contest a round table discussion will be organized, which is the third element of the event. Potential participants of the contest will be brought together under the name 'creatives' (architects, composers, multimedia designers but maybe also companies like constructors or contractors). They will be invited to join a discussion about subjects like co-creation, augmented reality, innovation and the concept of Poetic Transformations. The celebration event is only sponsored by Philips Design (efforts in natura) and Alice Foundation. The stakeholders for the contest are still not contracted yet, but expected is to embark with Park Strijp Beheer, the leading organization behind Strijp-S.

Besides studying communication aspects of the project, the research within the internship goes deeper into the world of Second Life (what is Second Life and what is its additional value on real life). Besides that, a worked out description of the creation of the Poetic Transformations environment is written down. Also the technical issues that were faced within the process are being exposed.

Introduction

Do you know Le Poème Electronique? This extraordinary building and media experience was designed for Philips by the French architect Le Corbusier (in collaboration with his student Iannis Xenakis and the composer Edgard Varèse), and was said to be the legendary first multimedia spectacle in the world. While presented on the Brussels Expo in 1958 it quickly attracted huge attention and became the lead showpiece for multimedia at that time. With that in mind Philips Design decided it was time for a celebration for its 50 year anniversary.

But how to celebrate this milestone in multimedia history?

Instead of creating a traditional exhibition and celebration party, Philips Design decided to not only look back but mainly look ahead. Why not build on Le Poème Electronique as an inspiration for the future and let the upcoming virtual worlds and augmented reality play an important role in this initiative? With this the project Poetic Transformations was born.

With the lead-question 'how to create the best experience flow for visitors and participants, for our virtual world project

Poetic Transformations' as foundation this term paper will get deeper into the world of Second Life. Nowadays we live in a world where information is approaching us from all possible directions. Companies which try to sell their products/ services and people who want to share their opinions. It is a big web of many individuals. That is why it is of great importance that our information/message is translated as clear as possible to our receiver. But what is this 'perfect flow'? What does that receiver want to see? The research chapters will continuously circle around this subject and will go deeper into the needs of the visitor in Second Life.



ÖSTERREICH

The Philips pavilion at the 1958 World Expo in Brussels

About Philips

As of September 2007 Philips adjusted their brand and strategy to better embrace the current and future consumer needs. This chapter will give you a clear view on Philips, Philips Design (one of Philips' business units) and a department within Philips Design called Research Development and Innovation.

.1 - Royal Philips Electronics

Royal Philips Electronics of the Netherlands is a global leader in healthcare, lighting and consumer lifestyle, delivering people-centric, innovative products, services and solutions through the brand promise of 'sense and simplicity'.

Headquartered in the Netherlands, Philips employs approximately 134,200 employees in more than 28 manufactory sites and 150 sales sites. With sales of EUR 27 billion in 2007, the company is a market leader in medical diagnostic imaging and patient monitoring systems, energy efficient lighting solutions, as well as lifestyle solutions for personal wellbeing.

80,000 registered patents illustrate the innovative nature of the company. In a world in which technology increasingly touches every aspect of daily life, Philips wants to bring

'sense and simplicity' to consumers with advanced, easy to use products that are designed specifically to meet their needs, wherever in the world they may be.

Vision 2010

In September 2007, Philips presented Vision 2007. Their plan for developing the company over the next few years and the targets they'll be pursuing. This plan will take Philips through the last steps towards becoming a truly people-focused and market-driven organization.

Mission

Philips has reinvented itself many times, but through it all our core, the soul of our company, remained intact. That is because it was part of our company since its inception in 1891. It is the passion to 'Improve the quality of people's lives through timely introduction of meaningful innovations.'

Vision

In a world where complexity increasingly touches every aspect of our daily lives, Philips will lead in bringing sense and simplicity to people.

Brand Promise

'Sense and simplicity'. This brand promise stands for Philips' commitment to deliver solutions that are advanced, easy to use, and designed around the needs of all users. By delivering on this promise, they empower people to fully benefit from innovation and technical advancement.

Values

Philips' values, the four D's, are like a compass; guiding them in how they behave every day, and reminding them of the attitudes they should have towards their work, their costumers and their colleagues.



Philips Design office in Eindhoven

Three sectors

As of January 2008, Philips has simplified their organizational structure to fully align with Healthcare, Lighting and Consumer Lifestyle. They refer to their new organizational units as ‘sectors’ rather than ‘product divisions’, because ‘sector’ here refers to sectors of the market rather than products. The names of the sectors also focus our attention on the needs they aim to meet, rather than on the products and services with which they might meet them.

1. Healthcare

Philips simplifies healthcare by focusing on the people in the care cycle; patients and care providers. Through combining human insights and clinical expertise, they aim to improve patient outcomes while lowering the burden on the healthcare system. Philips delivers advanced solutions for both health professionals, to meet the needs of patients, and empowered consumers for affordable healthcare whether in hospital or at home.

2. Lighting

As the world’s leader in Lighting, Philips is driving the switch to energy-efficient solutions. With worldwide electrical lighting using 19 percent of all electricity, the use of energy-efficient lighting will significantly reduce energy consumption around the world and thereby cut harmful CO² emissions. Philips provides advanced energy-efficient solutions for all segments: road lighting, office & industrial, hospitality and home. Philips is also a leader in shaping the future with exciting new lighting applications and technologies such as LED technology, which, besides energy efficiency, provides attractive benefits and endless new ‘never-before-possible’ lighting solutions.

3. Consumer Lifestyle

Guided by our brand promise of ‘sense and simplicity’ and starting from our consumer insights, Philips Consumer Lifestyle offers rich, new consumer experiences that meet consumers’ desire for relaxation and improving their state of mind. They address the consumer’s desire for wellness and pleasure, and they’ve mapped this approach by looking at the individual’s interest in terms of their Space, their Mind, their Body, and their Appearance.

.2 - Philips Design

Philips Design's aim is to create value, for customers, shareholders and society as a whole by delivering competitive high design solutions.

The customer is the main target. Important is that products are being developed for their certain wishes. It is no use developing products without a good proposition and a market. More than ever Philips Design really looks at what the consumer needs.

The brand promise 'sense and simplicity' includes Philips commitment to deliver solutions based on three pillars:

1. Advanced
2. Easy to use
3. Designed around you

Philips Design's goal is to be a truly cultural force in design, able to shape the coming era, which they see as focused on people's personal growth, the creation of a healthy, natural and man-made environment and the harmonious relationship between people and their surrounding.

- Philips Design has been established in 1925 and has its headquarters in Eindhoven, The Netherlands
- It is one of the largest and longest established design agencies in the world
- A creative force of 550 people
- With 7 branches, in 12 locations across 3 regions: Amsterdam, Eindhoven (Paris, Vienna) Hong Kong, India, Singapore North America (Andover, Atlanta, New York, Seattle)

Philips Design's aim is on 3 market sectors:

1. Healthcare
2. Lighting
3. Consumer Lifestyle

Philips Design in Eindhoven is active on all of these sectors. All of these businesses focus on customers and the quality of their lives. Philips addresses the needs of consumers in the four domains of lifestyle; space, appearance, body and mind and the needs of professionals that improve the quality of life in the domains of body (healthcare) and space (lighting).

One of the Philips environments in Second Life





Dolf Wittkämper, Senior director at Philips Design

.3 - New Initiatives / Virtual Worlds

Philips Design has a department which is responsible for research, development and innovation in the areas related to design. This department develops:

- New competences and new service areas
- Design led Intellectual Property (patents) in specific target areas
- New ways of creating value thru creativity and networking with other companies and institutions, this includes research into new ways of monetization
- Creation of longer term scenarios and ideas exhibited in the form of demonstrators called Probes. They are meant to build up early competence fields while provoke reactions and dialogue in and outside of the company

One of the new service domains is called Design for Immersive Virtual Environments (DIVE). This domain is looking at virtual worlds, serious gaming and the 3D web (or 3D internet) as a source of value creation for both businesses and people. DIVE is the responsibility of senior director Dolf Wittkämper.

A prime focus for the research in this area is to use these worlds as means for increased engagement with people both in the BTC and BTB areas. Companies need to tap into the needs and requirements of their customers. Enhancing the engagement is therefore increasingly vital. The insights thus generated are used to develop new and better products/ services. The DIVE program is focused on engagement but goes one step further and also tries to engage people in the co-creation of value.

Assignment - Background



Kalff, Le Corbusier and Varèse, in front of Le Poème Electronique

In May 2008 the first preparations for the project were made by approaching Philips Design and Dolf Wittkämper. At that time the possibilities for a decent internship assignment were discussed. Out of 5 possibilities one drew the attention, namely Poetic Transformations. The interesting background of the project and the optimal combination of design, ICT and communication were the main reasons to choose it.

.1 - Project history

The project history brings us more than 50 years back in time. In 1956 preparations were made for the construction of the Philips pavilion at the World Exhibition in Brussels (1958). General Art Director Louis Kalff decided to invite the French architect Le Corbusier for designing the pavilion. As response the Frenchman spoke the legendary words: *'I will not make a pavilion for you but an Electronic Poem and a vessel containing the poem; light, color image, rhythm and sound joined together in an organic synthesis'*. With this phrase a statement was born. Le Corbusier got the assignment and took over the leading role within the project. Together with his student Iannis Xenakis and composer Edgard Varèse he designed a futuristic experience. The combination of the sensational building and the presence of more than 400 speakers surely contributed to the success. Despite technical problems the pavilion attracted more than 2 million visitors (!) from May till October. After the closing of the exhibition the building was pulled down. Since that date Poème Electronique has been seen as an important legendary milestone in multimedia history.

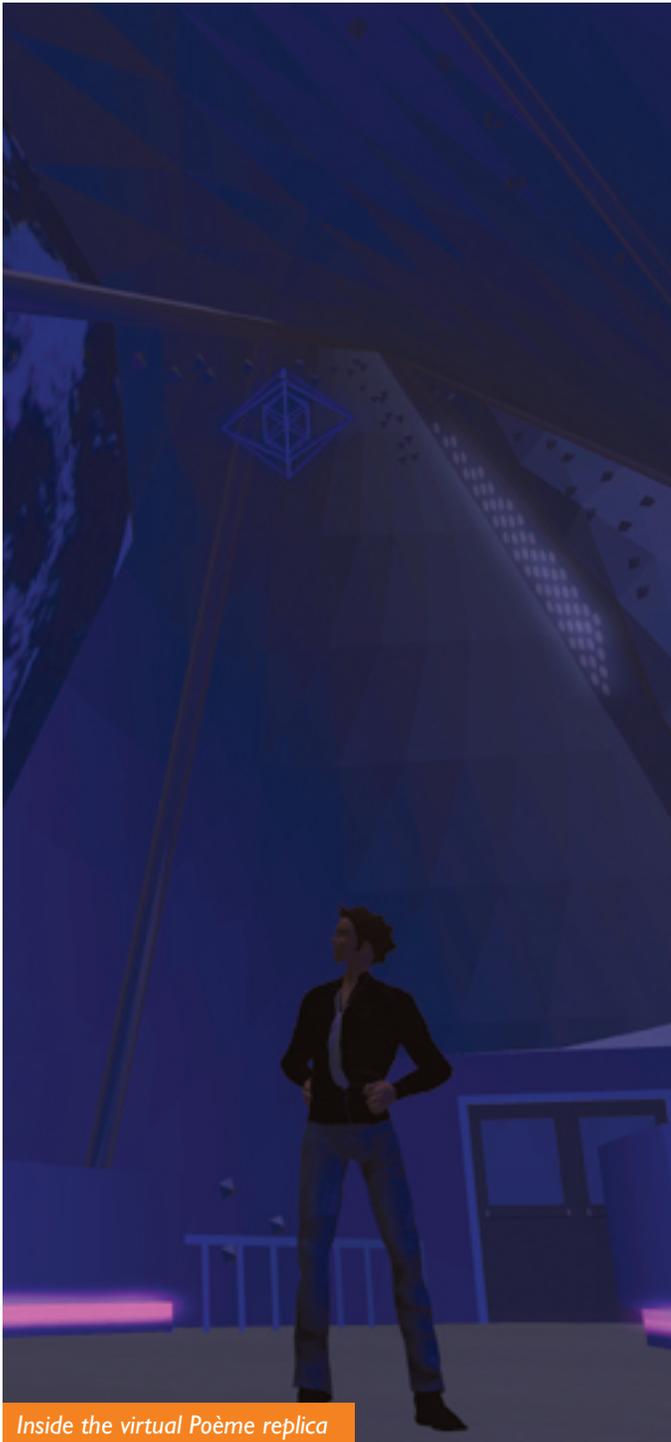
.2 - Current situation

In the past 10 years a couple of parties performed research after the Poème. For example in 1996, Marc Treib released the book *'Space Calculated in Seconds'*. In his book Treib talks (in vivid detail) about the idea and development of the Philips project. He also describes the working methods of the collaborators.

The Dutch professor Kees Tazelaar (Institute of Sonology) investigated the original audio tapes of the Poème around 2002. He realized that with the aid of the computer, a much better synchronization of the 5 tracks could be made. An 8 track interpretation of the complete piece was the result and was presented the same year.

In 2004/2005 a collaboration between 4 different Universities within Europe (lead by the Virtual Reality & Multi Media Park in Turin, Italy) began working on a virtual reconstruction of the Poème. The Virtual Electronic Poem (VEP) project can be seen as 'present day homage to the Poème'. The result was a Virtual Reality installation that allowed a renovated fruition of Le Poème Electronique and an interactive application in 3D computer graphics that provided an access (through a headset) to the virtual scenario and the audiovisual show.

In 2006 the Alice Foundation (which embraces cultural heritage/initiatives around Eindhoven) published a book about the possibilities to recreate a real-time Poème at the Strijp-S complex in Eindhoven. In *'Make It New: Le Poème Electronique'* different scenarios were being presented and experts gave their vision about the pavilion. Plans about reconstructing the pavilion are still fresh although Fondation Le Corbusier (the foundation which manages the royalties of the original building) will not give their permission over usage of Le Corbusier's work easily. Also the financial side of the reconstruction is not solved yet.



Inside the virtual Poème replica

.3 - Desired situation

Members of Philips Design have been searching for a proper way to celebrate Le Poème Electronique. While supporting initiatives such as for Alice, Philips was also looking for a more engaging way to remember this unique Expo-submission. At that point Dolf Wittkämper stepped in with the idea for an expression and reconstruction through virtual space. At doing so both time and money can be reduced to a minimum, compared to a celebration in real world. At the same time it offers the advantage to organize an international event.

.4 - Assignment definition

The main project Poetic Transformations can be divided into 4 different partitions.

Le Poème Electronique Celebration

The main goal is to take a look into the past and celebrate as well as learn from it. The celebration consists out of two elements. The first one is a presentation that will be given by Kees Tazelaar, who is well-known for his research after Le Poème Electronique. He will discuss the technology and story behind the project and open the virtual reconstruction of the Poème. The virtual reconstruction is the second element of the celebration. Within Second Life there will be a copy of the Poème, as realistic as possible. It will not contain the full 8-minute show, but only a segment of it, which will take around 2 minutes.

Deliverables within the internship:

- Responsible for concept development
- Organization of the celebration event (communication plan and aspects included)
- Building the Second Life environment (which contains the presentation- and Poème environment)

Poetic Transformations Contest

While gaining inspiration out of Poème the project group strives to set up a new project that embraces co-creation within the architect- and design community. By organizing a virtual (and therefore worldwide) contest new innovative ideas will come up, and will be submitted to Strijp-S, a district inside of Eindhoven which is in a redeveloping-stage. This part of the project is planned to take place in the beginning of 2009, when all necessary contacts/stakeholders are known.

Deliverables within the internship:

- Responsible for concept development
- Working out global planning

Round Table Discussion

As preamble towards the contest a round table discussion will be organized. Potential participants of the contest will be brought together under the name 'creatives' (architects, composers, multimedia designers). They will be invited to join this discussion and to provide feedback on subjects like co-creation, augmented reality, innovation and the concept idea of Poetic Transformations.

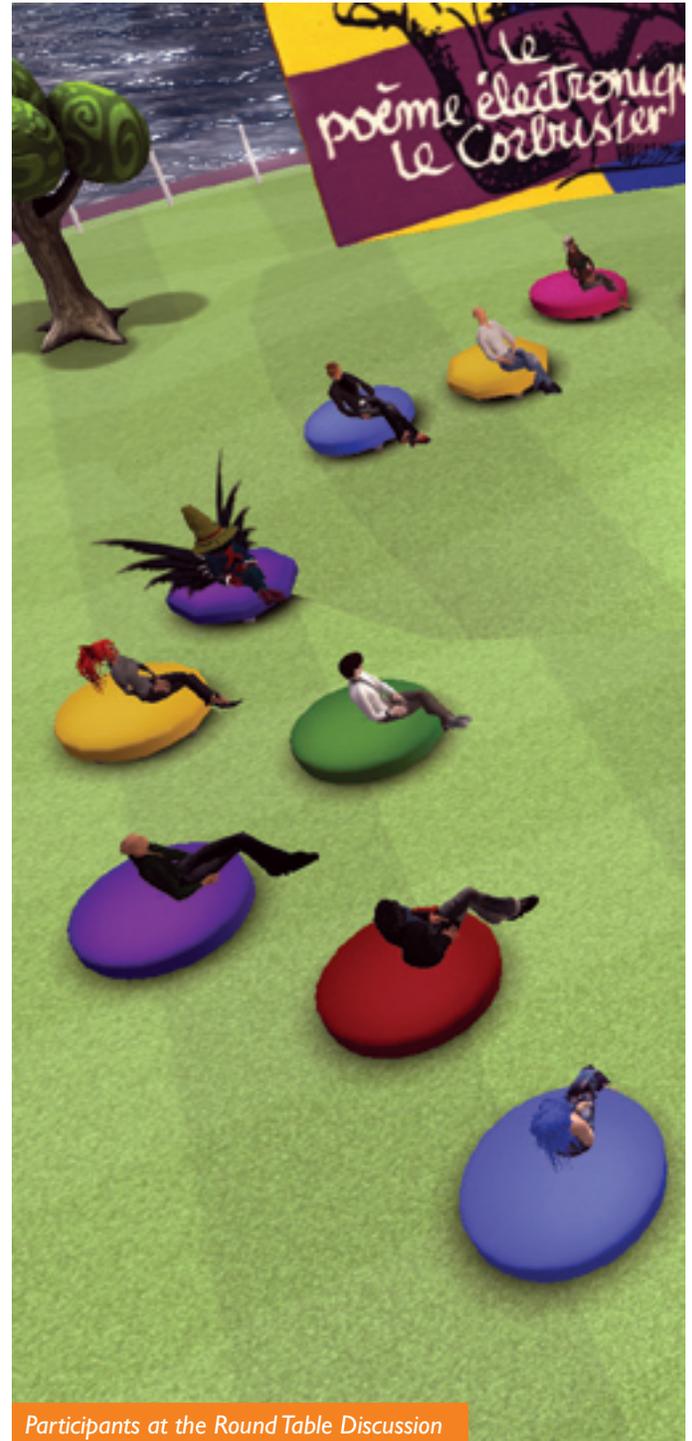
Deliverables within the internship:

- Responsible for concept development
- Building the discussion environment

Book publication of results

(not included in my internship)

At the end of the contest the possibilities of a book publication will be discussed. The release of a book will depend on many aspects like financial feasibility, enough worldwide interest and finding a publisher. At this moment, no actual plans have been made about this matter.



Participants at the Round Table Discussion



Klokgebouw (at Strijp-S complex) in Eindhoven

Assignment - Concept development

After picking up the responsibilities to organize a celebration for the Poème, the project needed an all-embracing name. While thinking about a link to Le Poème Electronique, the choice was made to call it 'Poetic Transformations'.

50 years ago the idea of an electronic poem was revolutionary. Almost nobody had heard (of) electronic sounds, let alone a full composition of electronic music. Nowadays people are under a spell of keeping up with today's technologies. The book of Gilmore and Pine (1999) was one of the first to describe the 'transformation economy' as the highest possible form of creating economic value. The term transformation is related to the ongoing change and improvement process which people will undergo. Currently technologies are in an upwards spiral, which involve people and their environment into various forms of 'transformations'.

.1 - Different Scenarios

Since the beginning The Poetic Transformations Contest was the biggest challenge of the project. It was clearly a contest which would require several sponsors. The spirit of the contest lays within the belief towards open collaboration. Also Philips Design wanted to find a main sponsor within the external market. A search for stakeholders was the result, which wasn't easy. Many different scenarios came up as the internship moved along. Especially the managerial steps were time-consuming. Because of the complexity of the project a list of different scenarios for the contest has been set up:

Scenario 1 (beginning of September 2008)

The first scenario contains the most optimistic route. The concept is invented by Philips Design and has less specific boundaries. The main target is to organize a contest for architects/creatives to create Le Poème Electronique of the future. A group of large stakeholders shall collaborate to set up this international event. Multinationals like IBM, Implenia, ING bank and Philips Lighting are considered as potential stakeholders.

The winning submission of the contest is also going to be brought in for Brabantstad, which is the collective noun for the 5 biggest cities in the region Brabant, namely Eindhoven, Helmond, Den Bosch, Breda and Tilburg. Poetic Transformations can be a useful project to support the aspiration for Brabantstad to become the European Cultural Capital 2018. To achieve this goal the first stakeholder to contract is Gemeente Eindhoven. If the Gemeente Eindhoven accepts collaboration and wants to become the main sponsor, the remaining stakeholders might follow. An appointment with the official of finance was then made.

Scenario 2 (end of October 2008)

After a long procedure the Gemeente Eindhoven referred the request to Park Strijp Beheer, which is the managing institution behind the Strijp-S complex in Eindhoven. The main reason for Gemeente Eindhoven to refer Poetic Transformations to Strijp-S is the fact that Strijp-S manages a specific amount of subsidy for recreating Le Poème Electronique. In the past they were already involved in a plan to recreate the Poème in real life at the Strijp-S complex, which had to revive the legendary project.

A new problem followed, which was caused by Alice (which is a partner within the Poetic Transformations organization). Alice rather forsaked approaching Strijp-S because of the fact that they were the initiatives of the real reconstruction plan. With Poetic Transformations coming as a new plan for Strijp-S, the Alice proposal could become in danger. Finally, after a couple of weeks, Alice was convinced and agreed with the plans.

Scenario 3 (November 2008)

In November Design Initiatief 'by accident' became a potential stakeholder. In the previous months another project within the internship already produced a video production for Design Initiatief. Design Initiatief supports and stimulates companies within the design community to create new business opportunities.

After a presentation to the board of Design Initiatief they approved a further collaboration. A month later Dolf was invited to participate in a work conference, organized by Design Initiatief. The purpose of this conference was to bring interested companies together, for sharing thoughts about currently running concepts. Design Initiatief brought Poetic Transformations in as a concept. After all invitees were divided among temporarily workgroups, the workgroup were Dolf was in thought about Poetic Transformations and afterwards gave a presentation. They were proclaimed for the prize awarded by the public. This meant that the project won a cash prize of 20 K. This amount was intended to cover consulting expenses.

.2 - Final concept

Organization

The initiatives of the project (Philips Design and Alice foundation) have resulted, as planned, in the celebration for the 50th anniversary of Le Poème Electronique at the end of 2008 in virtual space. The celebration consists of 3 activities, namely the Kees Tazelaar presentation, the reconstructed Poème experience and a round table discussion. The first event's organization is visualized at the following column:

Philips (main sponsor)

Dolf Wittkämper

Originator, production director and event host

Bart Reijven

Concept, art direction, design, building, scripting, communications and video production

Slava Kozlov

Expert and round table facilitator

Jeanne de Bont

Expert Le Poème Electronique

Alice Foundation (event sponsor)

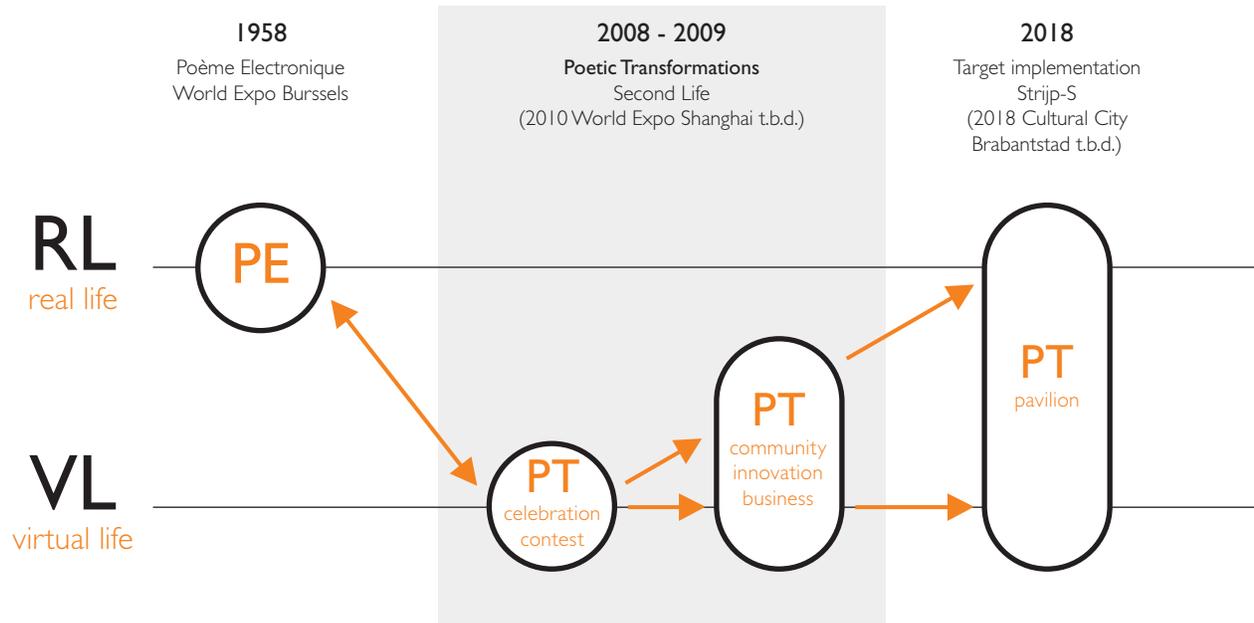
Han le Blanc

Expert Le Poème Electronique

When speaking of the total project Poetic Transformations the main sponsorship is a role which will be filled in by Park Strijp Beheer (at this point yet not definitive), while Design Initiatief will look for more suitable partners for the project. Philips Design, Alice and Creactiv will be regarded as the lead initiatives and will stay responsible for the project roll-out. Fontys and Technical University of Eindhoven are considered to become partners.

Official content

In 2009 a contest will be set up, which will build on Le Poème Electronique as an inspiration to engage into co-creation and exploring the future. The contest will be organized for architects/creatives focusing on collaboration and innovation towards a tangible multi sensorial business experience on Strijp-S location. The innovative submissions will explore the integration of the physical & the virtual and their interdependence, with special attention for immersive media and lighting. The best contest results can still be used as submissions for the ambition Brabantstad European Cultural Capital 2018 and can be exhibited during the World Exhibition 2010 in Shanghai thus forming a link with Le Poème Electronique.



The project can be summarized with the following one-liner:

Poetic Transformations is a proposal to build innovation concepts and generate business opportunities by means of web3D collaboration tools and community building in the domain of architecture, lighting, interactivity and media, the Poème Electronique will be a main source of inspiration and the new Strijp-S complex the innovation context.

The context of the desired situation is to create interplay between real and virtual life. With the real Poème Electronique and the virtual contest the project group will set up a Poetic Transformations pavilion which is in augmented reality.

The program consists of the following goals:

- I. To source an array of business/architecture opportunities for the reserved location on Strijp-S complex. These innovative experience architecture concepts will explore new ways to integrate the real and virtual, augmented reality, interactivity, light and sound into cutting edge transformational works
2. To facilitate and build a community of creatives including architects, lighting experts, designers, sound specialist and many more in a cutting edge innovative contest format
3. To develop, organize and perform this using online applications and a permanent immersive virtual 3D space. Inspiration and facilitation will be provided from, in the first place, one of the first multimedia architecture experiences created, Le Poème Electronique. Secondly from the Strijp-S/public lighting context and vision. And at last from collaboration tools and applications for online & 3D virtual world (for co-creation, experience, build, meeting and presentation to empower global creative teams)
4. To support the country and regional positioning programs such as: Leading in Technology, Eindhoven Design, Eindhoven City of Light and Strijp-S
5. To build up knowledge, experience and opportunities in the area of community building, co-creation, creative collaboration, architecture, design, lighting, interactivity and virtual media

Vittoria island, built by Philips Design



Research - Second Life

.1 - Background

Second Life is a 3D virtual world, launched on June 2003. Second Life came to international attention via mainstream news media in late 2006 and early 2007. A free downloadable program called the Second Life Viewer made it possible for users (called 'residents') to interact with each other through motional avatars, providing a social network service combined with the general aspects of daily life. Residents can explore, meet other residents, socialize, participate in individual and group activities, and create and trade items (virtual property) and services with one another.

The world of Second Life is divided into more than 10000 land areas. Each area or region is 256x256m large. Each region is simulated by a single server, and is given a unique name. Properties can be used for commercial purposes; residents can buy, sell, and rent smaller land areas from each other. The most basic mode of transport is by foot, but avatars may also fly, ride in vehicles and teleport directly between locations.

To build into the world, Linden Lab (producer of Second Life) included a primitive-based 3D modeling tool that allows residents (with permission of the land owner) to build simple virtual objects. A scripting language called LSL (Linden Scripting Language) can be used to add behavior to these objects. Other content, such as more complex 3D objects (called sculpts), textures, animations, gestures and sound samples must be created using external software. The Second Life Terms of Service ensure that users retain copyright to any content they create.

Second Life uses an internal currency called the Linden Dollar (L\$), which is usually obtained in exchange for real money. Users may also offer items or services to others in exchange for L\$; services like working in stores, business management, entertainment (which prominently includes adult entertainment), custom content creation, etcetera.

At the beginning of September 2008 just over 15 million accounts were registered, although there are no reliable figures for actual long term consistent usage. In January 2008, residents spent 28,274,505 hours 'in-world'; so on average about 38,000 residents were logged on at any particular moment.

.2 - Deep dive Session

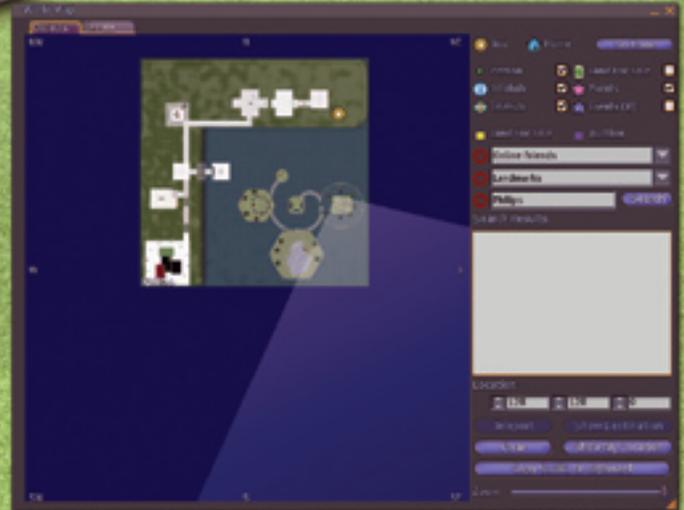
In the summer of 2008 the registration of the avatar Bart Hellershanks into Second Life was a fact. In 2007 already some considerations about joining came along after hearing numerous media attentions about a Second Life hype. But forasmuch as the lack of time in real world an attempt to join was never made. But with the prospects of this internship at Philips Design (within the department Research and Development - DIVE) it was recommended to spend some time in this game-like environment.

The first thoughts about Second Life weren't good. It felt like a game, which had its purpose to enjoy people. While discovering different regions one thing in particular was striking, namely the clear division between the personal and the business side of Second Life. While wandering through badly invented clothing stores it all came together why Second Life wasn't taken serious anymore (referring to the media attention later on about the failure that Second Life seemed to be).

A lot of useless regions are present in Second Life. The most extreme example is a virtual store to order real-time clothes. This mall (which looks like a maze) has walls decorated with pictures of shirts, pants and shoes. When clicking on a beautiful Hawaii shirt the user is redirected to a web shop in 2D space, were the next steps in the order route have to be taken. What is the purpose of walking miles through a store in search of your desired t-shirt, while a 2D web shop is much more efficient/clear? Well, one thing is sure: those kinds of fiascos are well-represented in Second Life.

On the other hand: businesses like IBM and Sun are putting huge efforts in virtual worlds, especially on improving the communication and work aspects within the virtual. Solutions to avoid travelling (less traveling cost, time and CO2) could potentially become practice with worlds such as Second Life. While having a personal and spatial contact you can operate behind your desk.

After spending time in Second Life a couple of improvement suggestions can be visualized. While taking into account its pioneer role as virtual world a couple of improvements are listed at the next page.



Search engine and World map

Second Life Grid

A well known issue is the fact that Second Life is currently running from the Second Life Grid, an online software platform which is installed on the Linden Lab servers. The problem lays within the fact that many businesses cannot get through their firewall to use this grid, and because of their desire to manage their own valuable and confidential data (instead of storing their data on someone else's server).

More and more companies are investing in creating a so called Open Grid. Linden Lab is supporting these initiatives by investigating this matter. As soon as a decent Open Grid is available businesses can download a complete software package (which contains a viewer and a grid) to install on their server.

Interface

Second Life requires 80 up to 400 kbps bandwidth, which always seemed to be a problem. When loading that much data it simply requires a lot of time. The result is the lesser quality of the graphics. It sure isn't bad, but it could be much better. The lack of shadows is something a lot of users are

complaining about. As well as the many bugs that are still not fixed. For example, sometimes you are redirected to an underground corner of a region when you try to sit on an object.

Another deficient tool within Second Life is the search engine. Referring to a region is (except in-world teleports and Second Life url's – called slurls) possible through the search and map-engine. Both engines are weak because no content of the region is searchable. Only the entire title of a region can be searched after in the map-engine. The search engine searches as well in the description text of a region. Surely not enough, comparing to nowadays' powerful search engines.

The dropdown menus and other visible buttons are well positioned but sometimes a little over the top. As newbie it is hard to find a specific option in the dropdown menu, while many useless options are present. For example: a region/estate button is listed in the dropdown menu. But for avatars which are no land owner (98 percent of the users?) this button is completely useless.



Building tool

Building Tool

The primitive-based 3D modeling tool that is implemented in Second Life is limited. The available primitives are hard to handle as they seem to live their own lives. Try to undo actions sometimes will only make it worse. Rotating objects can turn into a desired position but often go wrong. The maximum 10-meter-size-limit seems to be the subject of many Second Life forum topics over the internet. In case of the desire to construct a building larger than 10 meters many prims are needed. Gladly some experts were willing to crack its system to create so-called mega prims, which can be downloaded from various websites.

Also the limited import possibilities (of 3D models or animations) is a slipped opportunity. On the other hand: Second Life stimulates the creation of simple and smart 3D Models, due to the existing limited bandwidth. Big and complex buildings just seem to require a lot of bandwidth of the Second Life server.

Communication

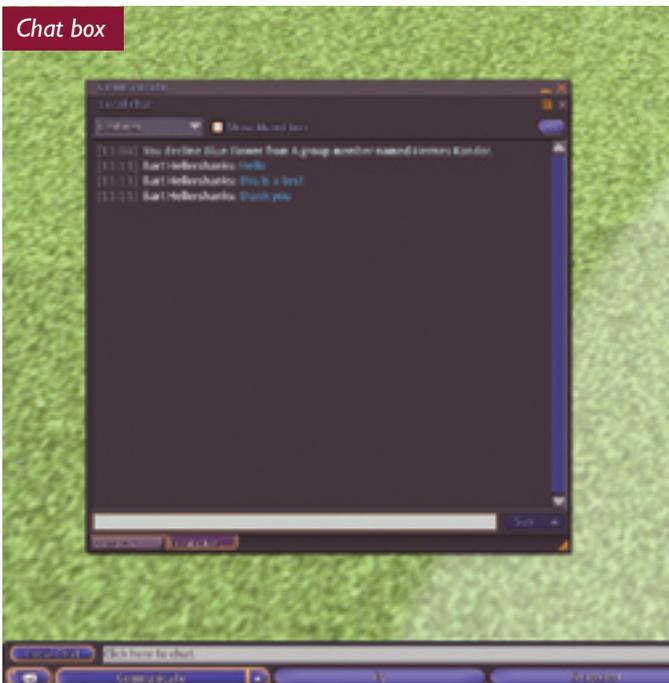
Communication within Second Life is possible through different ways: voice chat, text chat, instant messaging, group notices and gestures. When running different tests the voice chat appears to be an excellent working option. Signals are being sent from the avatar, which results in a spatial feeling when moving along a 'speaking' avatar.

The text chat can cleverly be activated (by pressing enter) and deactivated (by pressing escape). A disadvantage is the fact that all chat windows are placed in one little screen. Navigating between different chats can only be done by clicking on the specific tab. Tabs don't light up clearly, which sometimes makes it very hard to manage different conversations.

With the Instant Message (IM) service you can send your receiver a message into a chat-window real time. Each individual can select, if desired, to receive these messages by email when not online.

Groups

Second Life has its own social community tools build in. So called 'groups' can be created by every individual on any topic to attract other interested avatars to join. The groups allow various ways to interact with its members. Group notices are



Chat box

an often used way of communication within groups. A notice consists of a title, description and possible attachment (image, note card, object). A disadvantage is the fact that only plain text can be typed. Linden Lab could at least have implemented a simple rich text editor function.

.3 - Ideation Quest

Before the Poetic Transformations project was installed in the Philips environment, it was under the spell of the Ideation Quest. The Ideation Quest was a tour that had its purpose to create innovation/co-creation between Philips Design and visitors of the experience. For the Poetic Transformations environment it is important to know and learn about the (dis) advantages of its predecessor.

The tour was officially launched on Monday June 16th. The aim was to start communication and attract people from the Second Life community and Philips Design friends group, and to introduce the region to people as a place to 'cooperate and explore the future by design.' A schedule was made twice a week on the region showing when members of the Ideation Quest team were available for questions and tours.

Josephine Green (Senior Director of Trends and Strategy Philips Design) points out in her paper 'Democratizing the future':

At Philips Design, we believe that we have to challenge and re-think our approach to creating business and values for the future...It seems that making sense and making sense in the future lies in understanding how people are evolving, engaging with them on a journey of discovery and exploration and co-creating and envisaging the future together.

The Ideation Quest on the Philips Design Co-creation Island was conceptualized by Thomas Kohler (a Ph.D. candidate in Marketing and Innovation from the University of Innsbruck) and Dolf Wittkämper. The design support came from Apple Antwerp, scripting was done by Dirty Mclean. Also Slava Kozlov, Philips Design senior people researcher, supported the whole concept. He is the co-author of an interesting paper called 'To Play Or Not To Play' very relevant in this context. And, Dr. Daniel Stieger and Dr. Johann Füller from HYVE played a substantial role in shaping the concept of the Quest.



Starting point of Ideation Quest



Play our Ideation Quest!

Philips Design is always looking for innovative ways to support health and people.

The open innovation program is a chance to share your ideas with us.

The ideas we select will be shared with us. Ideas are shared and then we will be looking for innovative solutions.

We will be looking for ideas that are innovative and can be shared with us.

We will be looking for ideas that are innovative and can be shared with us.

We will be looking for ideas that are innovative and can be shared with us.

We will be looking for ideas that are innovative and can be shared with us.

PHILIPS

WELCOME - IDEATION

Are you the one who can think outside the box? We want to hear from you!

Share your ideas with us and we will be looking for innovative solutions.

We will be looking for ideas that are innovative and can be shared with us.

We will be looking for ideas that are innovative and can be shared with us.

We will be looking for ideas that are innovative and can be shared with us.

The Ideation Quest explores people's love of games, ideation and collaboration, for example, through the collection of points which are given by other avatars. An avatar on the Ideation Quest has a so-called ideation meter above their head which is the mechanism to keep score and 'participants can collect points along the three dimensions that are considered relevant for innovation: creativity, collaboration, and expertise.'

Elements of the Ideation Quest

After an arrival experience where basic questions 'Where am I? Why am I here, and what do I want to do?' are answered, the Ideation Quest moves into an inspirational scenario drawn from one of Philips Design's award winning probes into a sustainable future through off the grid living. This is the heart of the quest that encourages individuals to explore and ideate on the topic together.

Philips Design presented, 'Off the Grid: Sustainable Habitat 2020' in Japan in the AXIS building. 'Off the Grid' is part of the Philips Design Probe program and is a continuation of the Skin probe which was listed as 'best innovation of 2007' by Time Magazine and was recognized with a Red Dot 'best of the best' award.

Dolf explains:

We call it a Design PROBE. It is in sense a provocation to think fundamentally differently about a topic. A probe is to start a discussion, to shift boundaries and it can ultimately be used to brief technologist to develop in certain directions too. The skin of the building is smart and on the inside there are 4 zones where treatment of water, air, waste and light is explained. We have more SKIN related probes on the site.

In Second Life there are a number of distinctive features to the Probes so users are given a chance to 'directly' experience a creative concept, not by just reading about it, but through audio-visually interacting with it in virtual space.

Then the Ideation Quester moves on to the challenges in the third phase. These tasks aim to stimulate creativity by involving avatars in a number of activities. The first challenging task a user faces is a so-called free word association. To overcome

the second challenge users need to answer a set of knowledge questions and engage in a sentence completion task. Every object holds a multiple-choice question and is related to the question. The questions encourage the acquisition of domain-specific knowledge.

The third one is a brainstorming session. After 4 participants are seated, a brainstorming session is initiated. The fourth is ideation. Avatars are invited to visualize and express their ideas. In the sandbox area participants can collaborate to innovate and interact in real time. The final task of this stage is for avatars to submit their ideas in the form of a 3D model, in writing or in any graphical representation through a web interface.

In the final stage of the quest participants are able to review comment and judge other submissions.

.4 - Fontys region

Three years ago the University of Fontys started to explore virtual worlds. At that time Active Worlds seemed to be the best solution. But since one year ago they skipped to Second Life, because of the more fictional opportunities. Paul Dirckx, project manager at the Fontys Pedagogisch Technische Hogeschool (PTH), leads different projects related to virtual worlds. As well as intern projects (for Fontys) he provides his services to external markets too. Frank Niesten is his subordinate; he designs and creates scripts. Together they are responsible for Second Life regions like Fontys, Reaal verzekeringen and muZIEum (a museum about vision/blindness, situated in Nijmegen).

The Fontys region contains 9 active institutions. Technokey is one of the newest events in the region. The main difference between a region like Philips and Fontys is that Fontys doesn't pursue to gain a lot of visitors. The region was made for students. They can explore the possibilities which Second Life offers. Events which take place are meant to educate students. Technokey is an example of this. Technokey is a learning application for career development. In the future Fontys wants to create a test in Second Life for students to make their choice of career.

Paul explains:

Second Life has much wider borders to work within. If you want to simulate an architectural building in the sky...well you can build it in the sky. We desire an environment where learning is pleasing and where an informal way of learning is possible.

Fontys also implemented a sensor on their region. At this way Paul can always (at every moment of the day) monitor which avatar is in the region. At his office he installed a Nabaztag/tag, which is a wifi gadget moulded into the shape of a rabbit. It notifies Paul when someone enters the region, by telling the name of the avatar.

As far as the urban planning goes, Paul says:

When we bought the island it was totally empty. Therefore it is helpful to have some connections with architects. So I decided to contact some. With a few tips in my back pocket we decided to

make a starting point at the centre of the island. This coordinate was also the centre of an intersection, which later on became our path... Then it just all came together, and every institution got its own parcel.

Within his interpretation roads are not only to walk on, but to show directions also. Because avatars are flying a lot in Second Life, Paul asked himself why then put signs next to the road? And because students already were informed in what direction to go, signs were not needed at all according to Paul.

The launch of the project was a huge event. After a promotion campaign of invitations and press releases through the Fontys website the event was organized in a couple of classrooms through the PTH-building. Paul and his crew installed equipment which showed a mix between virtual and reality worlds.



Paul Dirckx at the Fontys region

.5 - Movie My Second Life

The American director Douglas Gayeton went into Second Life for about 7 months to record his movie 'My Second Life'. This is the first entire movie shot in Second Life, ever.

He created an avatar called Gayeton Ringo who, just like the man in first life, makes a living out of directing movies. The lead character is Molotov Alva, a man who suddenly disappears from the real world and trades his life for a virtual one.



In his journey, Molotov (an avatar who is physically modeled after Gayeton) encounters many people in cyberspace who enlighten him about his environment. Orhalla Zander is a seeker who scoffs at the pursuit of personal possessions, and is the first person to inspire Molotov to seek the 'Creator.' Molotov also meets a woman named Deedee, and finds that her avatar is radically different than her real-life appearance. Another woman, Christine, transformed herself into many disguises like a cyberpunk and anime character who are difficult to blend in with other groups within the world. None of these attempts have brought her any closer to the Creator.

Eventually, Molotov meets Abigail, a woman who just might be his soul mate. In the end however, their inability to achieve any kind of a physical connection, or even make progress towards normal societal goals like marriage and children, dooms their relationship.

An interesting story, full of interesting dialogues. A quote from Gayeton that sums it all up is:

In virtual life nothing is real. Even walking isn't really walking; nothing is what it says it is. But then I realized, the world I left was also composed of imitation objects. My leather sofa hadn't been real leather. Nor was the non-dairy creamer in my coffee.

The movie sets a statement that positions itself between the opinion of the friend and enemy of Second Life. It shows the use of virtual space, but on the other hand will lead you through a fictional game-like world where people with no social lives are spending their days. A story which will remain in mind when thinking about Second Life.

.6 - Conclusion

Deep Dive Session

After spending 20 weeks in Second Life the opinion started with has to be readjusted. Arguing about whether virtual worlds are a waste of time or a useful opportunity are still there. Linden Lab, the company behind Second Life, clearly believes that virtual worlds can improve our lives in the real world, as do a lot of others like SUN and IBM. As a remark on this opinion, it can be stated that Second Life is an addition on the current 2D web internet and our real lives.

Especially the cost and time-saving aspect for businesses is something to believe in. When organizing meetings or education lessons in Second Life, enormous amounts of travel expenses and travel time can be saved. At this time the technology behind Second Life is not capable of those kind of events, especially at that scale. But within the next 5 years (when the open grid options are optimized) many large companies will shift towards virtual space, yet alone for those purposes.

An aspect which is not successful in Second Life is the technique/interface. While understanding their bandwidth issue, you can still think up many other options in Second Life which can be more logical/effective. Examples are the presence of shadows and a decent communication and search engine.

Ideation Quest

The Ideation Quest surely was an interesting environment. Its purpose was made clear in an early stadium within the quest. It is important for visitors to know what to expect. Paths were made clear and weren't misleading. The opportunity for visitors to share their thoughts with a company like Philips is very well thought out. It motivates visitors to stay on the island and to show their interest in Philips.

Only one other aspect is worth mentioning when thinking about improvements. Except some colored poofs the environment was mostly white/gray. The region could be described as sterile, straight and bleak. The usage of more colors would be nice while carrying out the 'Sense and Simplicity' feeling.



Fontys

Fontys' purpose in Second Life is to inform their students while having them work in virtual space. It is not a goal to collect as many visitors as possible. And that is the first conclusion a visitor will get while entering the Fontys region. Sadly enough there are no relations found with the Fontys brand, which is fresh, young and spontaneous. In virtual space the atmosphere is depressing (because of the use of gray toned colors) and messy (all mixed styles and illogical partitions). The Fontys region is like a big sandbox. When keeping in mind that its purpose is for students only, the main question is: why make this environment public? This is not a way for a company to identify itself to the world.



The advantage of virtual worlds is that people unconsciously relate it with real life. That is why it is important to build in familiar aspects of our daily lives, while using the opportunities to experiment in a way that you're not able to in real life.

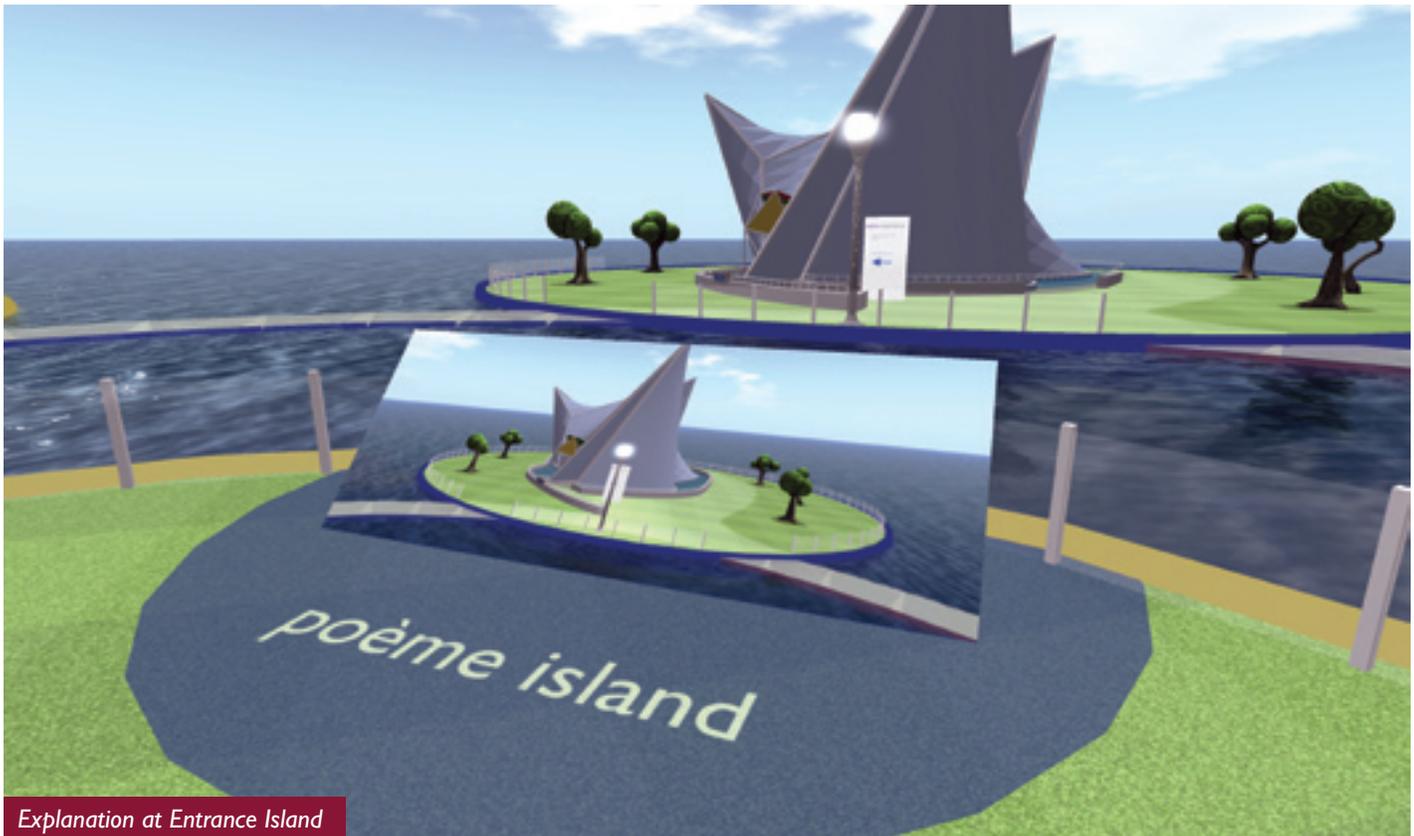
Le poème électronique Le Corbusier





Research - Communication

The main question for the research phase is ‘what is the best experience flow for visitors and participants for the virtual world project Poetic Transformations?’ For this matter, a clear subdivision is possible. This question can be approached from all directions ICT Media Design offers: design, communication and ICT.



basic tutorial

How to MOVE

Use Arrow Keys to Walk and Turn

How to LOOK

Hold ALT key, Left Click and drag mouse to Look

3. How to FLY

Use PAGE UP/DOWN for moving on Z-axis

4. How to SIT

Right Click on chair, press SIT HERE

5. How to CHAT

Click ENTER button, then type to Talk. Press leaving

Noob information

.1 - Experience flow

Recognition

Like the final statement of the conclusion formulates, an advantage of virtual worlds is that people unconsciously relate it with real life. That is why it is important to build in familiar aspects of our daily lives. For example: a path is to walk on; arrows show the direction to go. Another question you can ask yourself is what a visitor wants to see first when entering a world. Naturally, people want to see the basic information first. What is the island all about, what can I do?

Simplify

During research it was very unpleasant when facing spider web kind of infrastructures within a virtual environment. Even cross sections are in most scenarios superfluous and indistinctly. That is why it is important to simplify, just by leading visitors directly to the desired place. If they are stubborn (or try to take shortcuts) then let them be. The option to fly is always open.

Landing point

In Second Life it is possible to select your landing point for visitors to enter your world. This is a big advantage for builders, considering the fact that they all want to lead their visitors along a specified path through the region. This path starts with a 'dropping' location. Landing points are automatically set to the coordinate 128/128/0, which is the centre of a region. It is optional to edit the position of this coordinate. Approaching a region in Second Life is possible through a couple of ways; by using the search-engine, the map-tool, via slurls or regular teleports. Teleports and landmarks are not linked with the landing point but always will be set by script or avatar.

Noob information

A term often used by online communities is 'noob'; a reference to a new inexperienced computer user. A newbie person which never used Second Life must have the opportunity to experience your environment as someone who was in there for years. It is important to provide the necessary information to move through the experience properly.



Clearness

One of the most important things to take into account when designing an environment is to make sure it is clear. Use proper colors that make a plain distinction. The use of signs is of extra importance because you are handling a 3D environment. Under the cloak of 'less is more' it is important not to use useless objects, but to bring serenity into the environment.

View distance

The sizes of a region are 256 by 256 meters. The draw distance can be set from 64 till 512 meters, which means that Second Life only shows objects within that specific range. You have to take into account that you must put valuable content (like signs or important panels) within this range of the avatar. Otherwise visitors might miss an essential part of your experience.

Overwhelm

The advantage of virtual space is the fact that you can attract visitors to a specific location by overwhelming them. Use objects that they have never seen before, or be creative with objects that are boring in daily life. But be sure your experience stays recognizable and clear.

.2 - Visitors and participants

At the start of the project a big question was how to trigger potential visitors to visit our region. That is why a list of possible reasons for visitors to enjoy the Poetic Transformations experience has been set up.

Poetic Transformations gives them the opportunity to:

- Share/gain opinions about co-creating within augmented reality and the design community
- Network within the design community
- Celebrate/experience the Philips pavilion and its Poème Electronique in virtual life (considering that visiting in real life is not possible anymore)
- Gain inspiration out of Le Poème Electronique
- Get in a personal touch with Philips in an easy way

These points will be taken into account when designing the experience. In this way the environment will be suited to the wishes of its users.



Poetic Transformation invitation pop-up

news items later on (by Dolf and Jolanda Mastenbroek, who is a communication manager at Rivers Run Red).

The most important goal is to inform architects and creatives within Second Life. That is why an investigation after user groups within Second Life is the next step. A wide variety of interested groups is listed below. The table visualizes the large amount of people which will be reached when approaching a specific group. Unfortunately not every group member is active anymore. That is why the aim is set on 30 percent of every group size. The way of contacting every group is through its owner. That is why every owner will be contacted through Instant Messaging and email (after seeking and finding the real name behind the avatar through the internet).

More information can be found in the communication plan in the digital appendix

.3 - Organizing event

An important part of the event is the organization. Dolf Wittkämper is teamleader, while communication responsibilities are part of the internship. First thing to do is setting up the target groups. Target groups can be divided into the following subgroups:

- Contacts and partners
- Architects and creatives
- Le Poème Electronique fans

The contacts and partners are easy to contact because there has already been direct communication. Le Poème Electronique fans are not highest priority, because there is a 40-visitor limit (due to bandwidth limits) during the event at December 17th. After the event fans are very welcome to visit the experience. They will be informed through blogs and

Group name	Target	Size
RL architects in Second Life	Architects	606
Studio Wikitecture	Architects	231
Extropians	Creatives	280
Ideation Quest	Creatives	75
Philips Design Friends	Creatives	220
Open Architecture Network	Architects	149
Virtual Architects Association	Architects	189
Society for Virtual Architecture	Architects	498
World Wide Architecture	Architects	93
School of Architecture	Architects	109
Designers of SecondLife	Creatives	528
Creatives, artists and musicians	Creatives	576

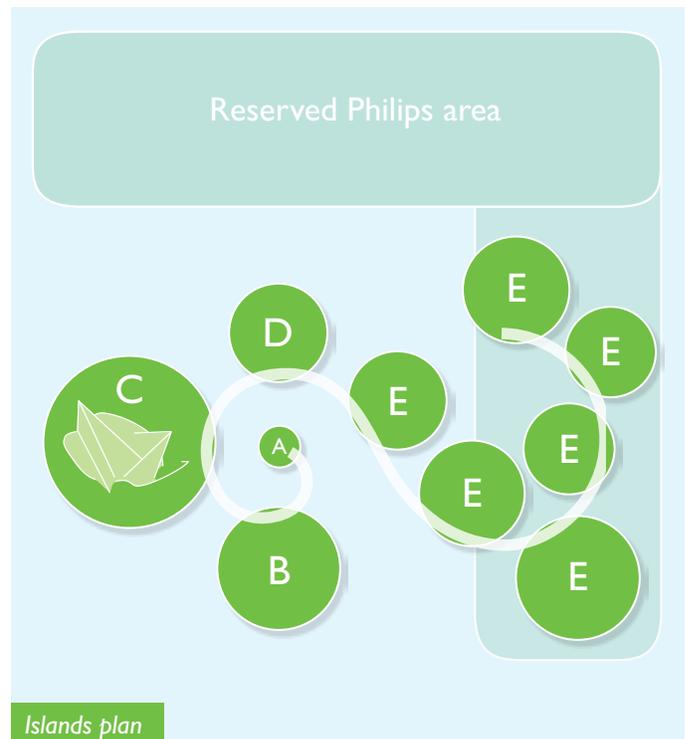
Design - Creating a world

Week 10 of the internship. After the Ideation Quest is removed from the Philips region a new environment has to be set up. The Poetic Transformations experience will be built in two steps. The first step will only contain the celebration setting. The second step will add the contest setting, which will show the top 10 of new submissions.

.1 - Islands concept

Terrain in Second Life can be divided into land or water. Land can be modified with different options, like loading your own texture. The fact that Linden Lab began collaborating with builders of the Windlight viewer (progressive viewer containing many extras) brought beautiful water settings into the Second Life viewer. The fact that water is now one of the most developed aspects within Second Life resulted in the decision to use more water in the Poetic Transformations environment. A second (and maybe more important) reason for the usage of water is the fact that water suggests to avoid it. Water gives available land a more important value. It guides visitors to use land and so to experience the environment in a way that should be the intention.

The Poetic Transformations environment is parted into different islands. Every part in the experience has its own island, which results in a more clear flow for the visitors. The different islands are (divided into the steps of creation):



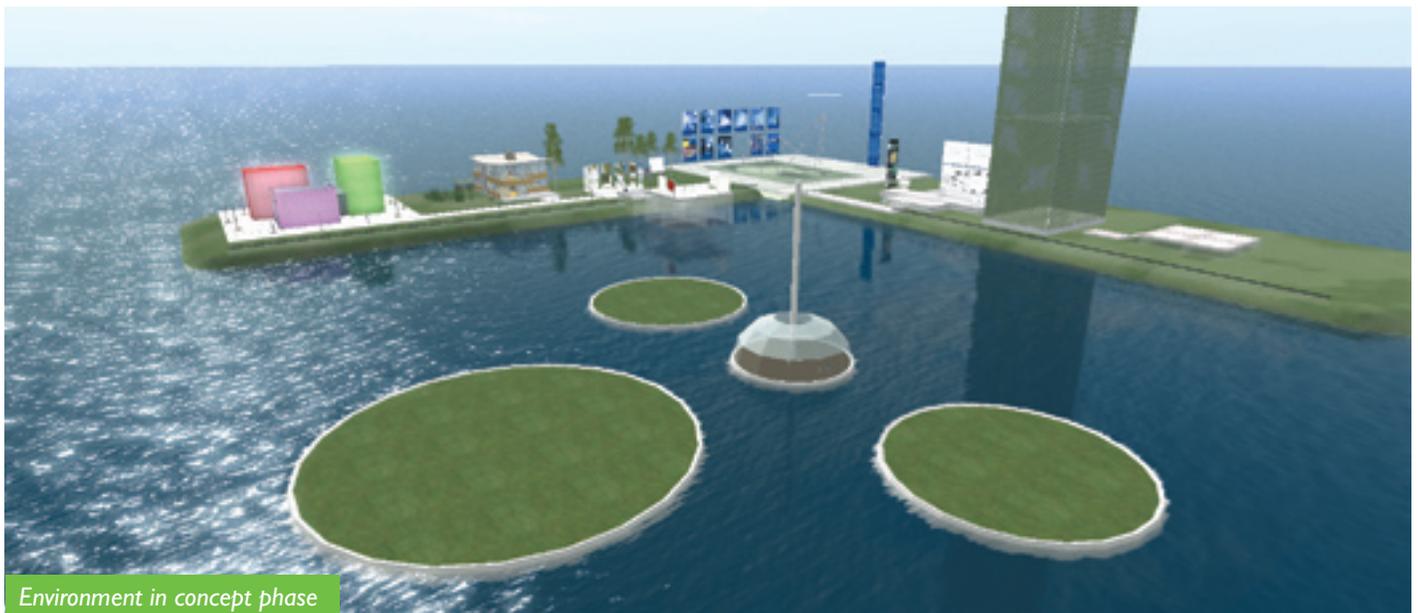
Step 1 (November 2008)

- **Entrance Island (A)**; the island which will serve as landing zone. After visitors have entered the island they will get a quick impression of the environment. The island contains clear information about the other islands but also contains basic information for newbies to move within virtual worlds
- **Introduction Island (B)**; after people have explored the Entrance Island they will be guided (by means of a path between both islands) to the Introduction Island. The most obvious part of the island is a collection of poofs in the center of the island. Those poofs will invite the visitors to sit down and watch a presentation by Kees Tazelaar. Around the presentation section a history tour is set up. Besides the information in the presentation by Kees this history tour will give a clear timeline-wise story about the Poème
- **Poème Island (C)**; when enough information is collected at the Introduction Island, visitors will get the opportunity to move to the next island, which is the Poème Island. The most notable island of all contains a 1:1 scale replica of the Philips pavilion from 1958. Within the pavilion a 2 minute excerpt of Le Poème Electronique can be experienced

- **Discussion Island (D)**; the last island of the first step of the Poetic Transformations project is the Discussion Island. With a similar but smaller design as the Introduction Island this island is optimized for discussion purposes

Step 2 (Begin of 2009)

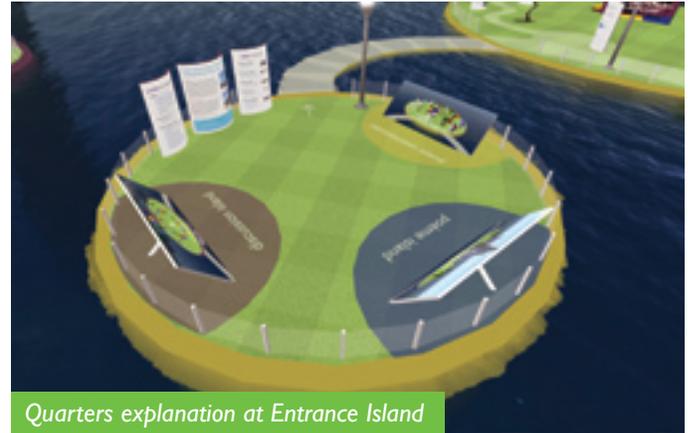
- (previous islands)
- **Contest Island (D)**; after the first celebration event has been held the old Discussion Island will be transformed to Contest Island, which will be the start of the contest area. The island will be designed to organize a presentation about the contest. Besides that, information like examples and regulations about the contest will be available for (potential) participants
- **Submission islands (E)**; while the contest is running, a new environment will be set up. The new environment will be composed of 10 different little islands, which form the top 10 of all submissions that have been judged by a professional jury. After the ceremony and announcement of the winner, visitors will be guided from Contest Island along all top 10 submission islands



Environment in concept phase

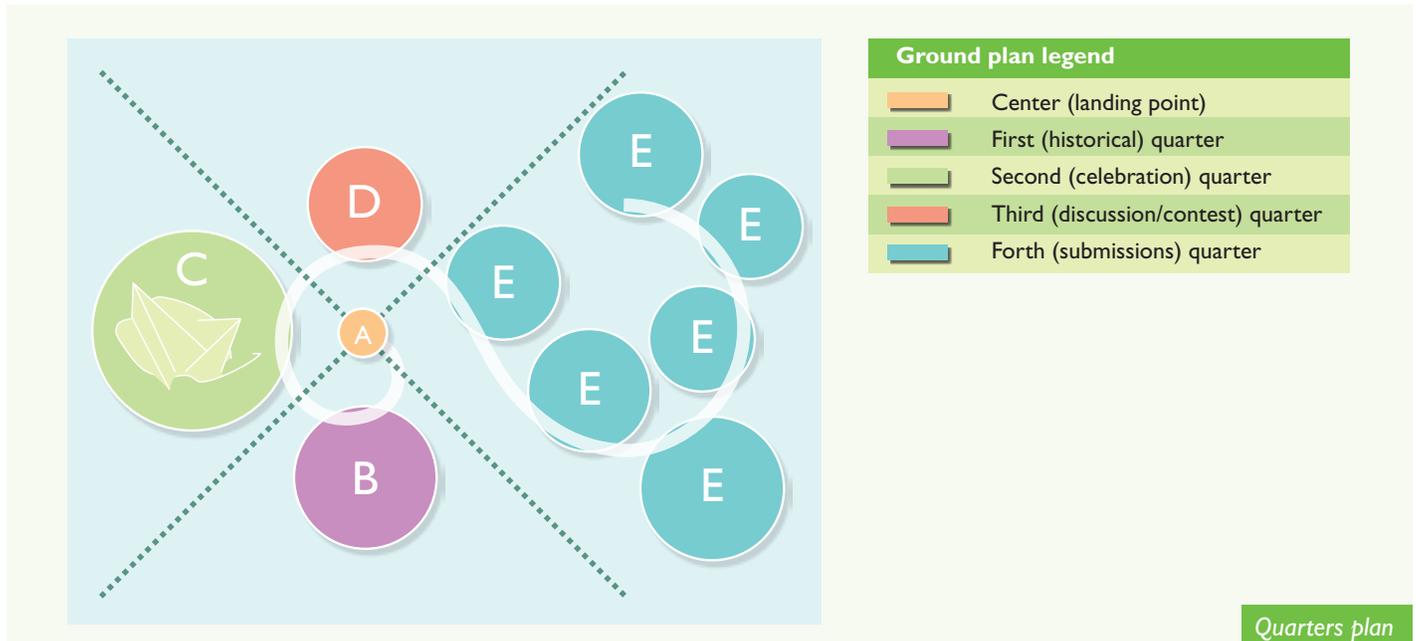
.2 - Four Quarters

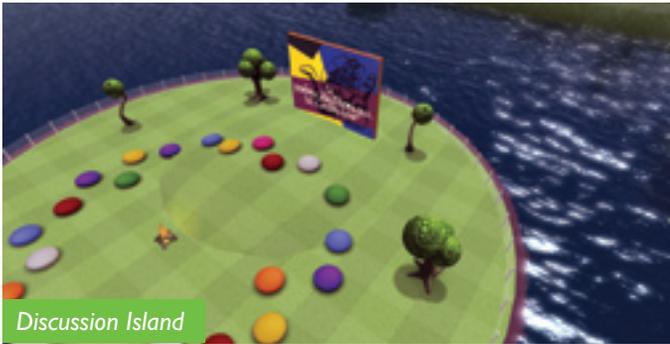
After drafting the islands concept a ground plan was made. When moving the different islands to their belonging position a new idea came to shore. The islands can be divided into 4 partitions, which all have their own part of the timeline of Poetic Transformations. The center of the dividing is also the landing point of the Philips region as well as the center of the Entrance Island.



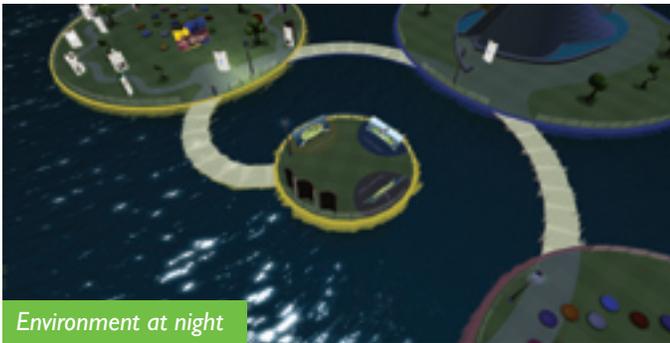
The Introduction Island is positioned in the first quarter of the timeline. Besides being the first island within the experience (namely the introduction of the Poème) it also describes the history of the Poème. The second quarter contains the Poème Island, which is also time-wise the next step into the history of Poetic Transformations (namely the celebration of the virtual replica). The third quarter in the first setting contains

the discussion; the third quarter in the second setting contains the introduction of the contest (Discussion Island / Contest Island). The fourth and last quarter shows the submissions of the contest. This quarter also closes the circle of Poetic Transformations, and at the same time marks the end of the project.





Discussion Island



Environment at night



Path and history tour panels



Island at night

Another advantage of this concept is the fact that, after being teleported to the Philips region, a visitor can take a simple overview over all 4 quarters and thus oversee the whole experience.

.3 - Lay-out

The lay-out of the environment was not easy to set up. After discovering a lot of regions within Second Life a suggestion for a specific desired look was worked out in a moodboard. The concept contained the following principles:

- **Philips brand;** while representing Philips the lay-out and style has to be within the identity guidelines of Philips. Nonetheless the choice was made to push the boundaries of the original branding. Like the old Ideation Quest the colors blue, orange and purple will be the basics, complemented with sterile/white tones. Shapes have to be clean and tensely
- **Motivating;** the experience has to be a motivating environment in which visitors/potential participants are invited to take part within Poetic transformations. Fresh colors and shapes have to give forth the enthusiasm of the project
- **Fictional but realistic;** experimenting with innovating but realistic shapes is allowed but must be kept within the Philips brand. A balance between the reality and virtual architecture has to encourage the visitor/participant to think within today's possibilities of augmented reality

Resulting in the final lay-out a good mix between different approaches has been made. The dark green grass was substituted by a lawn-pattern texture, as well as light-fictional trees made their entrance into the region. Bright but acceptable colors bring the perfect amount of motivation into the environment. The usage of transparent white paths and signs is an extension of the lay-out that was already present in the Philips region.



Design - Technical issues

As well as the Poème raised a lot of questions back in 1958, it certainly did too in 2008 when translating it to Second Life. The Poème consists out of three aspects which need individual attention:



Varèse's sound test studio in 1958

The structure of the Pavilion

Actually designed by Yannis Xenakis after the sketches drawn by Le Corbusier, the structure was a cross of surfaces bordered by hyperbolic paraboloids. The ground plan had the shape of a stomach.

The organized sound

With this project, Edgar Varèse fulfilled his lifelong goal of including space in a music composition. Eventually, the technology was able (at that time) to implement such an artistic novelty: Philips engineers distributed a vast number of loudspeakers all around the inner surfaces of the Pavilion, and piloted the sound according to the paths designed by the musician. The result was a complex net of sound trajectories along which the sound could circulate.

The images

The images were designed by Le Corbusier with respect to the organized sound. Most of the credits go to the film-maker Phillippe Agostini, who took Le Corbusier's scrapbook of images and made it into a coherent artistic whole. The black-and-white images projected on the two sides of the 'stomach' reviewed the history of human civilization from its origins to the present. A trip from darkness to dawn, a catharsis that evolved in step with the triumph of reason through science and came together in a finale of harmony and optimistic hope. Images included a nuclear explosion, a child's face, the silhouette of a bull, drawings of Le Corbusier's urban projects and many more.

.I - 3D model

An important obstacle within the Poetic Transformations project was the import of the 3D model. The organic framework and difficult algorithmic shapes of Le Poème Electronique caused a lot of issues. The result was a wide range of possible solutions, like sculpts and the Lathe-method. Nothing seemed to work for Second Life, which has a building tool that is limited and outdated. Many possibilities were found to convert the CAD model into Second Life, none could be turned into a solution.

Attempts for solving the converting-issue:

Prim Composer / Prim.blender

One of the first tools tested was the Prim Composer for 3D Max. The prospects were glorious. Creating your building in 3D Max and import it into Second Life. When installed and loaded into 3D Max it seemed nothing more than a Second Life interface implemented in 3D Max. The only advantage of this tool was the possibility to create a model without being connected to the internet. Prim.blender is a tool that can be compared to the Prim Composer, but only working with the freeware modeling program Blender. Because the decision was already made that building the Poème with prims wasn't a solution, both programs seemed to be useless for this matter.

Sculpts

Sculpts (or how they are called sculptyies by many) are the number one solution to create complex or organic objects. The shape is determined by an array of x, y, z coordinates stored as RGB values in an image file. For the Poème this technique had some disadvantages like the maximum resolution of a sculpt image. Consider all the coordinates from a 22 x 20 meter curved wall, saved in an image of 1024 x 1024 pixels. Another problem was the complexity of the necessary actions which had to be taken before a successful sculpt was exported. All these issues resulted in the decision to not take any further steps with this method.

Building by hand

It surely sounds awkward, but this was one possibility which seriously had to be taken into account. Maybe it was possible to import many different images of cross sections of the Poème, after which the prims would be placed by hand.

Unfortunately, only trying to make a test already took too much time.

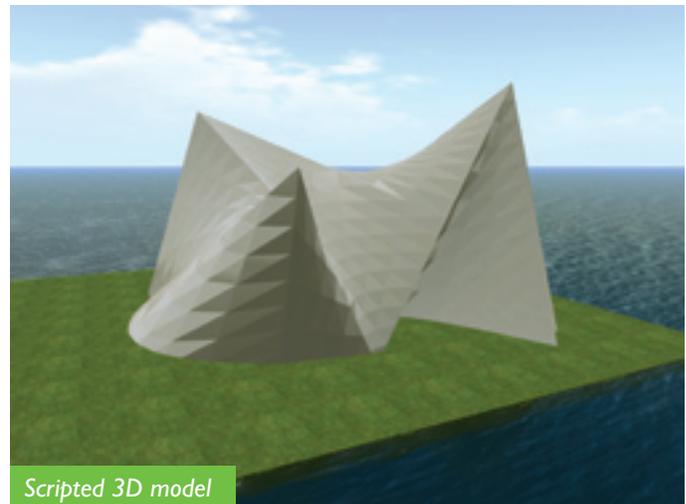
Cadroe lathe

The Cadroe Lathe method allows constructing a shape by defining its outline. By positioning 4 points you can create a curve, which is the fundament for the shape of the Z-axis. The Lathe is ideal for creating shapes such as the onion dome of the Taj Mahal, a giant champagne glass, or any shape with a smooth curve. But like all other attempts it wasn't a solution for the Poème. The Cadroe Lathe tool only rezzes a sphere with the shape of the 4 points. The Poème is much more complex. The Cadroe Lathe tool only seemed to be useful to create the borders of the islands in the experience.

Seifert Surface

A contact was made through a relation of Dolf to get in touch with Seifert Surface (real name: Henry Segerman), who is said to be a math wizard. With his scripts and formulas he is capable of creating the most complex buildings of Second Life. And yes, the hyperbolic paraboloids of the Poème were no problem for him. After 6 hours of work (and lots of contact by email) he created a very nice Poème replica, consisting of 1256 prims. All done through a self-made script which rezzed a wall by only setting the 4 corners of a hyperbolic paraboloid.

The final model, which was scripted by Henry Segerman, can be viewed below



Scripted 3D model

.2 - Audio

An important part of Le Poème Electronique was sound. The way Varese developed spatial sound through the stomach shaped environment was revolutionary. With the presence of 450 speakers, located in different sound routes, he created a dynamic flow in space. When comparing this to present-day technology it is hard to imagine the amount of work they spent in creating this 'simple' Dolby Surround effect. But like their lack of knowledge another different obstacle had to be faced, namely Second Life. Just like their limited build-tool it isn't easy to load multimedia into Second Life. There are some limitations listed below.

Only one linked media at the time

Second Life allows embedding 1 external media source into the parcel. For example you can include a video from Youtube to play in your world. The same goes for images, web content and audio. But the limitation of allowing only 1 link excepted this opportunity. Because of the fact that this channel was already reserved for the video in the Poème.

10 second limit for import sound

Linden Lab decided to build in a limit for uploading sounds. By this way they avoid copyright-disfiguration when users try to upload complete songs or compositions. For the experience a 2 minute excerpt of the poem was used. After browsing through different forums a decent solution was found. A jukebox kind of player, which plays 10 second sound files in a seamless sequence, was build. By this way the experience was created by placing 12 sound files after another.

After that a solution was found for creating the spatial effect in Second Life. The jukebox was linked with another prim that was guided (by means of coordinates) through the building.

.3 - Visual effects

This seemed to be the easiest technical matter to fix. In the original Poème Electronique visitors could see the same projection at 2 different sides of the Poème. While projected on the inner side of the curved walls the video was strengthened by the use of light effects. With the use of projection lamps, beamers, neon lights and much more, a

broad color spectrum was created. Like the 3D model and audio issues, a couple of problems for this matter were also found.

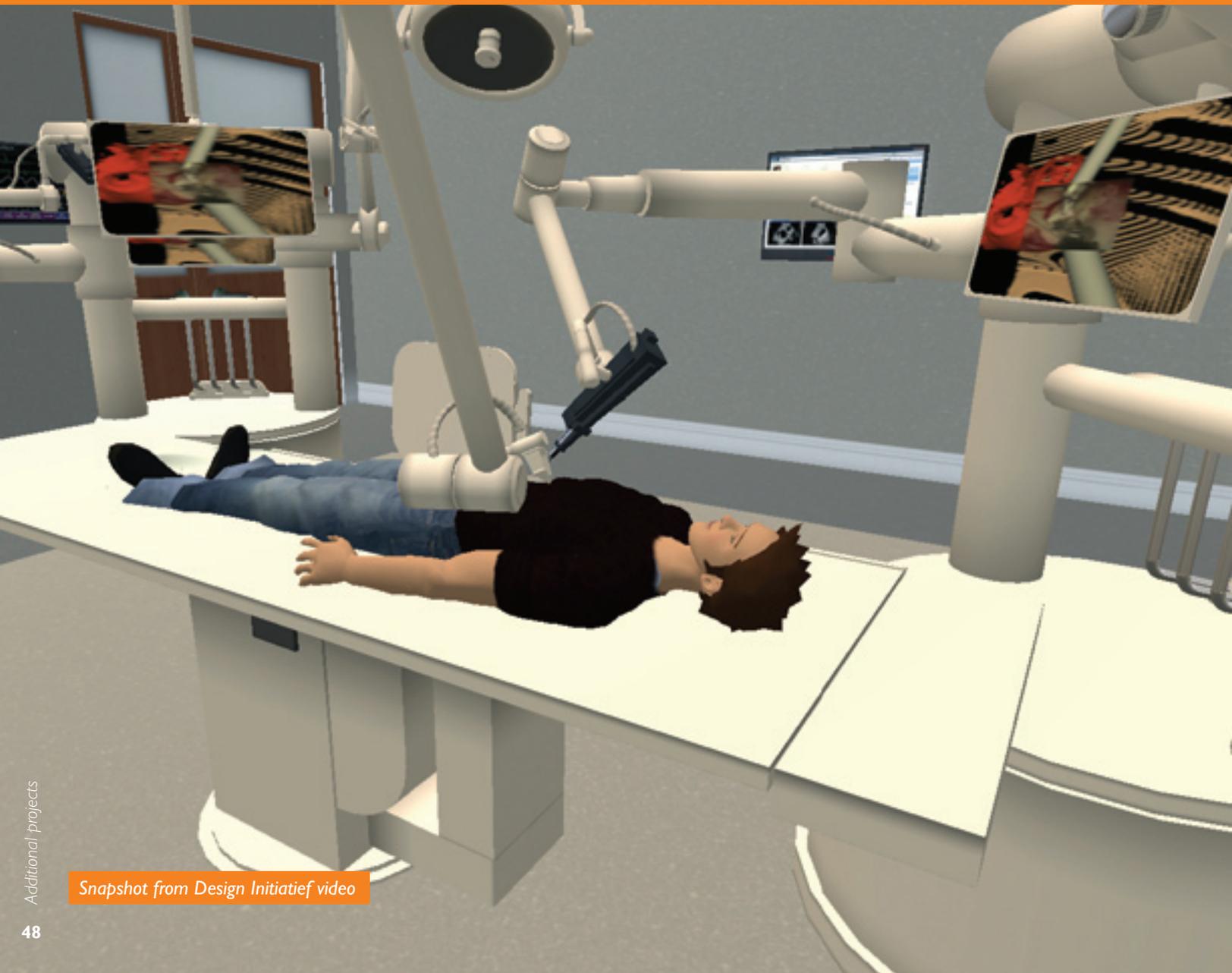
No projection possible

Second Life isn't capable of projecting imaginary against surfaces. With that option missing, it is hard to get a video on a strongly curved wall. The use of a flat half-transparent screen in front of the wall would be a perfect solution when looking at the screen from the front. But when looking from another angle you would look at the side of the screen. The solution was found by creating a screen which was parted into 8 different prims. All prims were placed together as tight as possible, next to the wall. Afterwards the video was loaded within all the prims. By aligning and scaling the videos within the prims a seamless screen was generated.

Malfunction with specific websites/extensions

When uploading video files on the internet for embedding into Second Life it was noticed that some websites were malfunctioning in Second Life. The most remarkable example is Youtube, which seemed to refuse to play after rebooting your system. Also the .mov-extension seemed to fail within some operating systems. After a lot of testing, a solution was found by running a mp4-file from the website blip.tv (which is comparable to Youtube, only with a better resolution).

Additional projects



.1 - Video productions

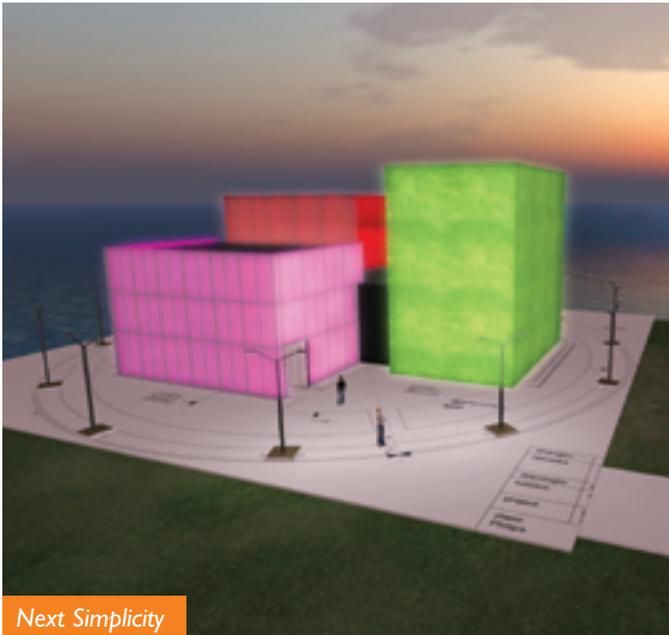
Through the internship some requests came in to capture videos in Second Life. The result is a collection of virtual shot videos, also called 'machinimas', which are explained down below.

Serious Games

As test/practice for handling the capture program Fraps and Second Life a short movie of the Serious Games conference in Second Life was shot. The remarkable aspect of this conference was its mix of real/virtual reality. Avatars in Second Life followed the real-life conference on a screen, as people in real-life saw the avatars' comments/questions.

Next Simplicity

Except from the Ideation Quest the Philips region had more spots for visitors to explore. An example is the Next Simplicity building. Intended for a London conference Dolf asked for developing a video that explained this Next Simplicity, while showing the surplus value of Second Life.



Next Simplicity



Serious Games

Ideation Quest

Before tearing down the old main experience of the Philips region a request came in to shoot a memorable video that explained the steps of the Ideation Quest, namely: Arrival, Inspiration, Challenges, Ideation, Idea review and Finish/Survey.

Design Initiatief

As preamble towards the cooperation in Poetic Transformations an introduction movie for Design Initiatief was shot, which afterwards seemed to be very useful. The purpose of the movie was to explain the work and goals of Design Initiatief (see also www.designinitiatief.nl). The video was presented in the presence of the Dutch minister of Economics Maria Van Der Hoeven, who plays a part in the movie too. In fact, the movie is a reconstruction of the opening in which the movie was played.

For this assignment the concept was thought out in cooperation with Dolf. Capturing the videos (handling of the cameras), recording the voiceover, regulating the music and editing the movie were individual tasks which finalized this assignment.

Video can be viewed in the digital appendix



.2 - Poster internship day

Twice a year Philips organizes a nationwide internship day. All internship students are invited to join this event, which contains different workshops, presentations and inside information. As a part of the day Philips organizes a poster presentation contest. Students that are willing to design a poster about their project are asked to give a 1-minute presentation about their poster/project within Philips. After choosing to participate, a poster about the internship was made within one day.

Unfortunately the contest was won by someone else (the prize was an Ambient Light lamp). Despite of a good presentation about Poetic Transformations, the students weren't interested. The reason was that the majority had a technical background and voted for the more technical projects.

.3 - Klokgebouw in Second Life

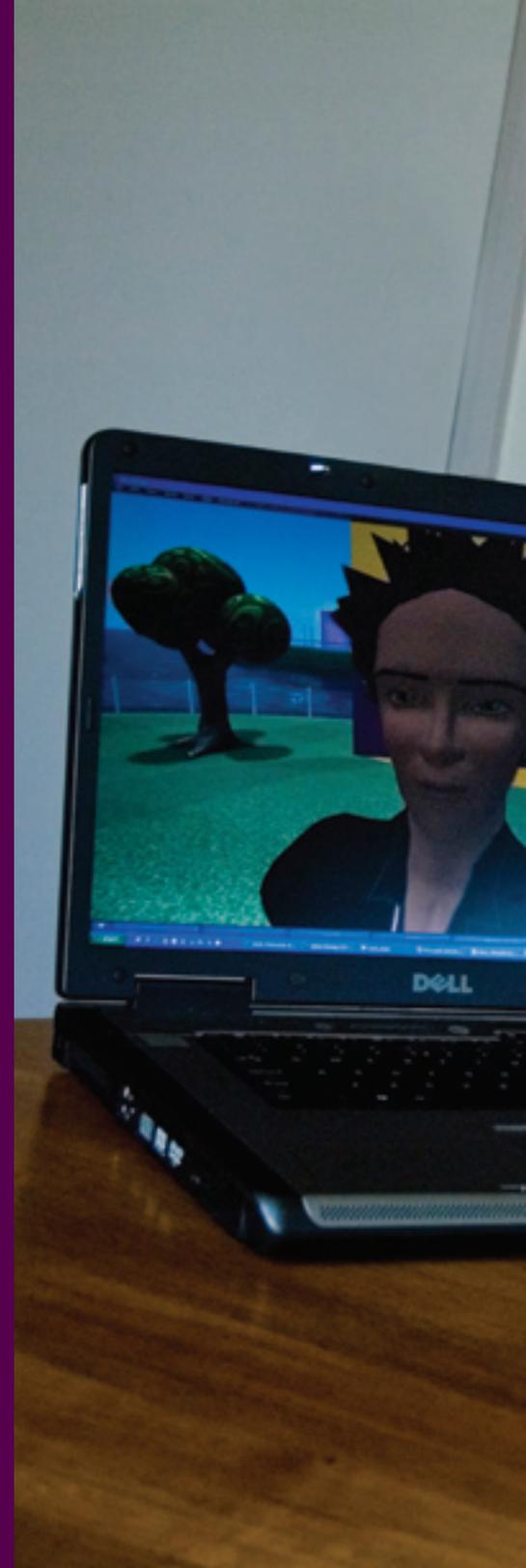
A short but remarkable project was recreating the Klokgebouw (well-known building at Strijp-S) in Second Life. Within 3 hours of building together with Dolf a realistic replica of the building was made. The purpose behind the reconstruction was a presentation which Dolf gave for members of the board of Park Strijp Beheer. Afterwards the board was excited about applying Second Life for simulating innovative lighting concepts.



Poster internship day

Evaluation

My internship at Philips Design; it sure was an interesting and arduous ride. Many things done, even more things learned. While contending with a rough start I managed to settle myself down in this inspiring environment of creatives.





.I - Process

In the beginning I had to get used to working at Philips Design and the highly professional way of working. I already was at a professional level with my own freelance work, but the Philips environment was another step up. I'm not always comfortable working in a strongly branded community, because I'm much more of a sense-driven and out-of-the-box thinking person. I sometimes found it hard to work within the boundaries of the Philips identity guidelines.

Within the first couple of weeks I installed myself at Philips Design, while starting up the project together with my internship coach Dolf Wittkämper. The project had its official launch when a meeting was planned together with the other team members from the organization of Poetic Transformations, namely Han le Blanc of Alice Foundation and Martijn Wilbrink of Creativ. From that moment I also began building up my skills within Second Life. I explored Second Life and its program language LSL. To follow my activities I started a blog, which I updated twice a week. I also managed to get a 3D cad model, made by another internship student a few years earlier. I started to convert the model into Second Life, which unfortunately never succeeded.

In the meanwhile I was working on the video production assignments, which took a lot of time (but were fun to work on). Concerning Poetic Transformations I designed a couple of ground plans and a moodboard. By doing so I gave the project a certain shape. For me it was important because working/ designing in virtual space was new for me. I soon discovered designing an environment in 3D wasn't that easy at all. My personal experience before the internship was mainly focused on websites, photography, video and graphical products.

From the 7th week I also started with the research for this term paper. I planned an interview with Paul Dirckx of Fontys and I investigated the Ideation Quest. Dolf also planned a Deep Dive Session with a few board members of Philips Lighting. Dolf tried to convince them that virtual worlds can be very useful for the lighting branch, and especially for Philips Lighting. We arranged 8 computers for them to explore Second Life. Unfortunately the meeting didn't work out as planned, because of a lack of bandwidth within the Philips network.

After the first half of the internship I started to work on the Design Initiatief movie. A large hectic production but a pleasure to work on. After its completion I reorganized and prepared the Philips region for the Poetic Transformations project to be installed. Together with Dolf I also started the search for a decent scripter to create the hyperbolic paraboloids of the Poème in Second Life. This quest resulted into attracting scripter and math wizard Henry Segerman.

From this point on everything speeded up. I made several sound tests to recreate the spatial sound, while writing the source of the jukebox script. I also finished the Plan and Process document, which I wrote at the beginning of the internship. Among other things I managed to design the poster for the Internship Day in week 13. For the history tour within the Poetic Transformations experience I designed the panels. At that very same moment scripter Henry Segerman finished the pavilion building in Second Life.

The communication plan was written in week 15 as the Poème in Second Life was dressed up with hundreds of speakers and 2 projection screens in the week after. With only a week before the launch the invitations were written and sent. The virtual experience was finished only a couple of hours before the event was launched.

A worked out timeline can be found in the digital appendix



Kees Tazelaar, presenting at the virtual celebration

.2 - Event

The official launch was on December 17th, 20:00. The event went nicely, with 26 participants in total. We faced many technical issues, all caused by a slow bandwidth and an overcharge of Linden Lab's server.

The presentation by Kees Tazelaar went arduously because of the technical issues. His voice stuttered through the voice chat and his presentation slides took a large amount of time to rez. Despite of those problems visitors were positive about the content of the presentation and its value. Luckily all visitors were aware of the fact that running an event with this amount of visitors can sometimes be problematic in Second Life. For the Linden Lab servers it is tough to handle larger amounts of people, all loading the same data at the same time.

Also the experience of Le Poème Electronique was afflicted by bandwidth problems. The total experience only played once, despite the fact that the experience was activated many times. The Round Table Discussion afterwards went smoothly; a lot of interesting subjects came along and many useful opinions were collected.

View a video report of the event in the digital appendix

.3 - Personal targets

Besides managing the project's goals I also set up my own personal targets before the project was launched.

Collaborate

Collaborating within a company is always habituating. I strived to get my collaboration skills on a higher level, especially because in the past I mostly worked on my own. Philips is a professional company which manages their own way of collaboration. An interesting asset was the fact that collaboration wasn't only in real space, but also within virtual space. My collaboration with Henry Segerman is a perfect example. Together we took care of recreating the Poème, while we never spoke/saw each other in real-time. Despite a different time zone and a different language we were able to create one of Second Life's most complex replica's.

Learn

Philips was a paradise to explore myself as a multimedia designer. I strived to learn more about Second Life (which was completely new for me) but I also tried to look over the shoulder of graphical designers and product designers. Regarding this last aspiration I was able to ask advice from Remco Timmer, who is a product designer. He gave brilliant input concerning the lay-out of the environment.

Transform

Working within a project group or team requires the constant ability to transform. Transform in a way that guarantees an easy work flow. Within the project I reacted on many different situations while keeping an overview on the project. An example was the fact that with only a few days left before launching the event, a lot of work had to be done. While numerous problems came to shore I was able to solve them in a way that was beneficial to the project. I almost missed some deadlines, but with a huge effort and smart anticipation everything was done in time.

Prepare

With my graduation at Philips Design the end of my school career is almost there. Because of that I strived to get into the rhythm of working on a daily basis, and to unfurl myself to a professional source within a company. When looking back I certainly can conclude this has happened. At this time I feel like a professional, because I finished a successful project within a professional business.

Research

Besides managing the work on the project Poetic Transformations I wanted to improve my research skills. I wanted to get more used to research with the help of a decent planning. The way I handled the research after Second Life and the communication is prove that I can be successful due to decent planning.

.4 - Philips Design

Philips Design is an inspiring environment to work in. For me the company is a collection of crème-de-la-crème experts who share the same passion, namely serving the consumer a high quality Philips product.

The fact that Philips is mainly communicating in English I experienced as a challenge. I never was a linguistic talent, even though I was always very interested in controlling the English language. While writing this term I surely underestimated it. It was sometimes hard for me to express myself while not knowing the right words. It impaired my contribution in many situations. On the other hand, it was a teachable experience for me.

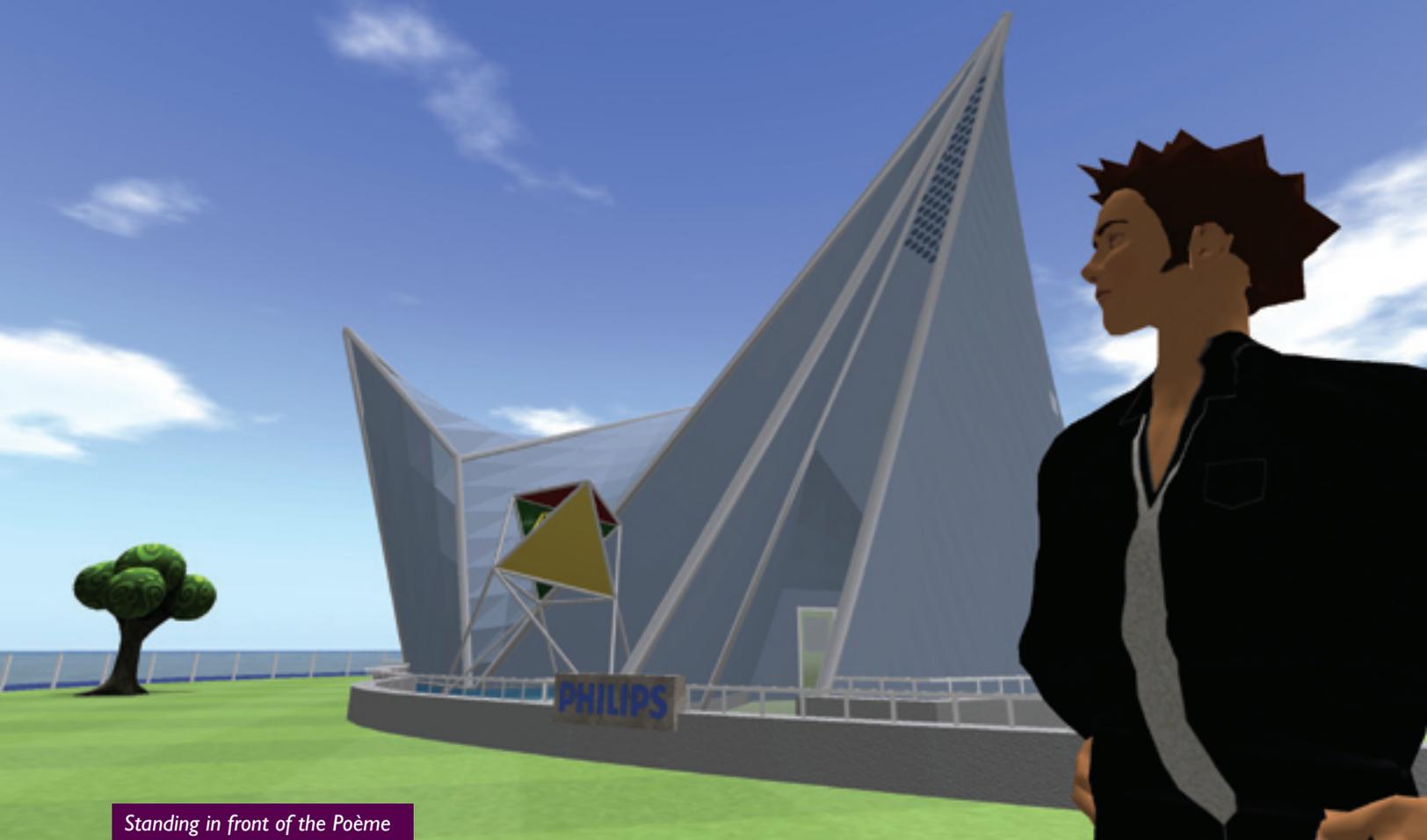
It sometimes was a struggle to work within Poetic Transformations. There is nothing harder than trying to finish on time without the finish line in sight. For almost four months (until the end of November) we didn't know what kind of event to organize besides celebrating the Poème. For me it was a important event, because of my concept to create a full life-circle where the Poème was only the beginning. Important was to create a bridge between the Poème and the future, which would complete the circle. The future is still open, but I paved the way.

I experienced the collaboration with my internship coach Dolf Wittkämper as very pleasant. He was always willing to help (despite how busy he was). I learned a lot from him, especially because he was very open. He made me part of the project and gave me the responsibilities I asked for (which I think is important within an internship). Everything was discussible, nothing was wrong to ask.

.5 - ICT Media Design

With the internship at Philips being my first and last internship for ICT Media Design (IMD), this is the perfect opportunity to take an overview on the education. For me IMD was an interesting education with many areas of attention. It gave me the opportunity to specialize within the aspects which had my preference. Besides that, my participation within the IMdelta (excellence) group gave me the opportunity to take my portfolio products to a much higher level. Especially when looking at the value of learning through the process and the relationships with clients the IMdelta group was of great value to me.

The wide range of different projects is certainly an important positive asset of the education. Aspects which I find improvable are the lack of decent English classes (which seem



Standing in front of the Poème

to be of great importance nowadays) and the attention for new sorts of media expressions. For example: I never got involved in working with virtual worlds or robotics. I think with the prospects for every student to prepare for the market, it can be helpful to take a look into the future besides only focusing on nowadays' technologies.

.6 - Project

Before my internship there were only few preparations made for this project. The day I started was actually the beginning of Poetic Transformations. This meant that the search for stakeholders had to begin as well. I think this phase of the project did cost too much time. My advice for other interns is to prepare those kind of business related matters before

the internship starts. Despite this fact I think it was a very interesting part of my internship.

Regarding the future of Poetic Transformations I hope Dolf will keep standing behind our concept, which is very promising towards the future. Sometimes it was very difficult to hold on to our principles, but I think we came out very strong at the end.

**I believe in the future of augmented reality
I certainly believe in Poetic Transformations**



Le
poème électronique
Le Corbusier



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Scaled VEP model

Philips Design

Virtual worlds can lead us into new ways of using the Internet. Philips Design believes that virtual worlds such as Second Life offer new possibilities to engage with people, experiences and places and can enhance the internet with added emotion and interaction. The power of feeling the presence of others or the possibility to build 3 dimensional objects together are strong new dimensions.

Philips Design is amongst others active in Second Life to investigate people's values and motivation in virtual worlds. By researching this we are trying to find new ways to relate to the end-user, and to build competences to design in immersive, virtual environments for clients inside and outside the Philips organization.

Philips Design has a leading position in exploring the use of Virtual Worlds for co-creation and people engagement. The first positive results show that Virtual Worlds are effective and potentially efficient in engaging with people for co-research purposes and even for co-creating new directions or value propositions. The Poetic Transformations project fits in this spectrum and Bart has done a great job in putting this rich experience together.

- Dolf Wittkämper



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