



Integrated Project on Pervasive Gaming

FP6 - 004457

Work package WP11: *Enhanced Reality Live Role Playing*

**Deliverable D11.3:
Game Design Document – Prosopopeia I
Rework**

Pär Hansson, Swedish Institute of Computer Science

Jonas Söderberg, Swedish Institute of Computer Science

Annika Waern, Swedish Institute of Computer Science

Karl-Petter Åkesson, Swedish Institute of Computer Science

Staffan Jonsson, Swedish Institute of Computer Science

Markus Montola, University of Tampere

Martin Ericsson, Interactive Institute

Jaakko Stenros, University of Tampere

Version: 1.0

Release date: October 13, 2006

Status: *public*



EXECUTIVE SUMMARY

This deliverable D11.3 is design description of the *Prosopopeia* enhanced live action role-playing game. It explains the central design principle of Real World as Game Interface called *Prosopopeia Proposal* and uses two technological prototypes used within the event (see D11.2 for more detail on the event) as an example. Due to the pervasive nature of live action role playing games and specifically the Prosopopeia event where a large part of Stockholm city was part of the game this deliverable cannot be a full game prototype deliverable, i.e. a lot of the particular game instance setup is non-repeatable. Thus emphasis is on the underlying logic and principles of the design, on that which can be deployed and adopted to other projects as well.

The technical prototypes explained here are the *EVP machine* and the *Thanathos ghost* voice synthesiser. The document also includes a description of the installation of surveillance equipment including software and hardware, which was used during the event, as this installation is of general interest and can be reused in future pervasive Larp events. Furthermore, the document provides a basis for some of the research carried out in the Tools work package and the future showcase ‘Telling stories from Pervasive Games’.

The prototype delivery includes the Thanathos software. The EVP machine exists only a single prototype, a hardware device which physically is kept in SICS office, Kista, Stockholm. It is however documented in detail in the deliverable to enable multiple copies to be made.

Purpose of this Document

The purpose of this document is to provide a summarized and structured presentation of one of the IPerG pervasive games from phase one. In addition this document provides pervasive gaming design examples and is intended to spread pervasive gaming design ideas in Europe.

Target Audience

This document is intended as a public document to all interested parties within the European game designer community and is intended to foster pervasive gaming development within the European Community.

Deliverable Identification Sheet

IST Project No.	<i>FP6 – 004457</i>
Acronym	IPerG
Full title	Integrated Project on Pervasive Gaming
Project URL	http://www.pervasive-gaming.org/
EU Project Officer	Albert GAUTHIER

Deliverable	Dx.3 Game Design Document – x
Work package	WP x Showcase – x

Date of delivery	Contractual	M 8	Actual	August 2006
Status	version. 1.0		final <input type="checkbox"/>	
Nature	Prototype <input type="checkbox"/> Report <input checked="" type="checkbox"/> Dissemination <input type="checkbox"/>			
Dissemination Level	Public <input checked="" type="checkbox"/> Consortium <input type="checkbox"/>			

Authors (Partner)	Pär Hansson (SICS), Karl-Petter Åkesson (SICS), Annika Waern (SICS), Jonas Söderberg (SICS), Markus Montola (UTA), Staffan Jonsson (SICS), Martin Ericsson (II), Jaakko Stenros (UTA)			
Responsible Author	Karl-Petter Åkesson		Email	kalle@sics.se
	Partner	SICS	Phone	+46 31 82 65 09

Abstract (for dissemination)	<p>This document explains the Prosopopeia proposal, a design idea that uses the real world as a game interface.</p> <p>This document complements D11.2 with details on the technical equipment developed for this example game. The game itself is a particular event within the Prosopopeia mythos. This following equipment is documented:</p> <ul style="list-style-type: none"> -The EVP machine -The Thanathos ghost voice synthesiser <p>In addition, we document the installation of video and audio surveillance equipment for the event.</p>
Keywords	Live Action Role Play, Alternate Reality Game, Embedded Technology, Surveillance Technology, Game Master, Enchanted Reality Game

Version Log			
Issue Date	Rev No.	Author	Change
2005-08-28	0.001	Annika Waern	Outline
2005-09-02	0.2	Annika Warren	Draft
2005-09-08	0.8	Jonas Söderberg	Draft for review
2005-10-19	1.0	Karl-Petter Åkesson	Final version with reviewer comments addressed



2006-08-30	1.01	Jonas Söderberg	First adoption to common format
2006-09-20	1.02	Jaakko Stenros	Thorough review and editing of the whole document, incorporating numerous additions.
2006-09-21	1.03	Jaakko Stenros	Yet more fine tuning.



TABLE OF CONTENTS

EXECUTIVE SUMMARY	I
Purpose of this Document	i
Target Audience	i
TABLE OF CONTENTS	IV
1 INTRODUCTION	1
1.1 Design Principle	1
2 GAME DESIGN OVERVIEW	3
3 GAME FLOW	8
Overview	8
Entering the game	8
Switching play modes	8
Entering/Leaving and re-entering the game	8
Social Adaptability	8
Pacing	8
Typical Playing Situation	8
4 GAME CONTENT	9
5 TECHNOLOGY USED	10
6 USER INTERFACES & GAME ARTEFACTS	12
7 FULL CREDITS	12

1 INTRODUCTION

“*Play the game as if it was real*” is the most important rule of *Prosopopeia*, as well as the central design principle. It has been labelled the *Prosopopeia Proposal* by the organizers. This principle thoroughly influenced all aspects of game design from role taking to gamemastering as well as device design to scenography. It motivated creating scenes where players had to actually do things for real with props that looked, felt and functioned exactly as if they were real.

In this document, the principle is explained and we also focus on the three technology components that were been designed and developed in a way that they are reusable within the *Prosopopeia* story setting for new events. This means that although they are not generally applicable to any Larp, but their realisation is sufficiently general to apply to a wider range of events than just this one. These are

- The *EVP machine*
- The *Thanatos ghost voice synthesiser*
- The setup and software used for video surveillance

In the conclusions we will discuss to what extent the designs generalise outside of the *Prosopopeia* story setting.

This document complements D11.2 [2] with details on the technical equipment developed for the *Prosopopeia* game design and event described in D11.2. As for all live action role-playing (larp) events, the particular event carried out within the project was a special case, and the exact setup of the event is not to be repeated. Therefore, the main goal for work package 11 is to produce technology and tools that are applicable to more than one Larp event and to provide these to Larp organisers and players as tools for content generation and event realisation.

Although the goal of WP11 is to produce technology and tools for ‘end users’, be they designers or players, the *Prosopopeia* technology as well as event was produced and developed entirely within the IPerG team. There were two main reasons for this. Firstly, *Prosopopeia* was our first event, and working with external organisers would have introduced an additional risk which we did not want to face for the first event. Secondly, the design and setting of *Prosopopeia* was highly novel and innovative, realising a truly pervasive Larp. This was possible due to close collaboration between designers and technology developers within IPerG and its forerunner projects.

1.1 Design Principle

The central goal of *Prosopopeia* was to create a game where it is completely impossible to tell where the game ends and real life starts. The players were expected to play the game as if it was real, and that was the only rule-technical instruction the players got outside of the game. This was called the *Prosopopeia Proposal*.

The only information the players had about the game was that they would be participating in a larp. The lack of rules and preparatory briefing created a number of design challenges. How to supply the players with characters? How to teach them how to operate the equipment? How to communicate the rules? How to tell when and where the game was played? And so forth.

All relevant preliminary information was supplied *in-game*, as part of the preparatory ARG phase of the event. The typical elements of larp preparations were absent; the players were not asked to prepare their character, create any costumes, or make contacts with the other in-game characters.

Construction of the game world was done in many ways, including reality fabrication (making game elements, such as websites, appear as parts of ordinary reality) and using non-game material as game material. The players were also expected to interact with complete outsiders, informed outsiders and game masters pretending to be outsiders et cetera.

The border of game and ordinary was blurred also in the fashion the game background was constructed. In particular, the ‘ghost’ characters that possessed the players (i.e. the roles participants were playing) were assigned were based on authentic dead people. This enabled the players to look up significant information about their characters on the web. Many elements in the fictional story were also adapted to

or inspired by the historical backgrounds of these characters, which in effect meant that many important game events had already happened for real before the game began.

The central location for the game was *Vattnadal*, an old boat in Stockholm. The boat was furnished as a hippie hideout, where one of the non-player characters lived before the game started. This area provided the players the chance to sleep, play, cook, do research et cetera. The function of “photorealistic” gaming venues was to support the mood of the game as well as to provide an authentic feeling where everything is scenographed in an “as is” fashion. Creating a seamless fusion of game and non-game is taxing and worksome task that requires the game organizers to e.g. handpick the books for a library. Other areas include abandoned Beckomberga mental hospital, an abandoned factory in Finnboda varv, a cave under Stockholm, a (real) new-age festival et cetera.

Games that allow the players to see them as part of ordinary reality can produce very engaging and interesting game play experiences. A game that supports the player in pretending to believe that it is not a game can be very overwhelming and exciting experience. As an experiment, *Prosopopeia* ventured far into this area, trying to combine this exciting aesthetic with a larp.

2 GAME DESIGN OVERVIEW

Features	The Prosopopeia Game Design
Research Goals	<p>The primary research goals were:</p> <ul style="list-style-type: none"> • How technology enhancements can be used to strengthen the <i>game master role</i> during the course of a larp event. • How players can meet an ‘enchanted world’, where objects and environments provide ‘magical’ or super-real phenomena. • How both of these effects can serve to implement a more complex storyline in a larp event, either through autonomous installations that can sense player actions and react to it, or through game master intervention. <p>The secondary research goal was:</p> <ul style="list-style-type: none"> • How technology can serve as a means to collect data for evaluation and documentation purposes.
Design Goals	<p>The primary design goals were:</p> <ul style="list-style-type: none"> • To explore in what way the introduction of real-time game mastering and guidance will change the game play and the players’ experience. • To break the limits of traditional games socially, by including outsiders into the game in several ways. Although this approach has been experimented in previous pervasive games, this is very unusual and also poses particular challenges in larp. <p>The secondary design goals were:</p> <ul style="list-style-type: none"> • To put to test in a model for role-taking that enables the players to seamlessly alternate between acting as themselves and acting in character. In <i>Prosopopeia</i> the players do not role-play characters, but acts as they are possessed by the roles characters. The possession model is expected to eliminate the players’ need to step outside the game; whenever the game would excessively disturb the ordinary life, the player could quit playing the ghost and revert to playing himself within the game context.
Game Setting	<p><i>Prosopopeia</i> was a larp about the forgotten and abandoned ideals and about freeing a lost friend who was left stuck between life and death after committing a suicide.</p> <p>It was set in our world, with certain supernatural (yet invisible) additions. This was done in a fashion that blurred the boundary of ordinary world and game reality to the fullest possible extent. The game was a direct continuation of real history up to the beginning of the game, spiced up with some supernatural elements.</p> <p>The event centred on a ghost story. The players played characters of authentic but now dead people who shared a common background: they had all been friends of a central character <i>Ingela</i>, lost between life and death for unknown reasons. They are bound to return to the land of living via possession, to find out what happened to her.</p>
Game Area	<p>The game took place in the greater area of Stockholm. The game was played both on the streets amongst bystanders as well as in pre-planned locations that had been prepared (propped) for the players. From the point of view of the players there was no division between improvises “street locations” and specific game areas with heavy scenography (as demanded by the <i>Prosopopeia Proposal</i>). In addition the game was expanded to the Internet. Within Stockholm area, <i>Prosopopeia</i> utilizes the aesthetical possibilities of urban exploration, taking players into abandoned industrial areas, caves and so forth to achieve a dramatic tension.</p>

Infrastructure Tools	The technology used in <i>Prosopopeia I</i> was communication and surveillance technology. The primary channel for in-game interaction was the EVP machine, supported by the Thanatos ghost voice synthesizer. In addition to this special-designed and propped solution, ordinary communication and surveillance equipment were used.
Genre	<i>Prosopopeia I</i> was a pervasive, alternate reality Live Role Playing (larp) game. The theme was that of a supernatural thriller using the aesthetics of urban exploration.
Target Group	<p>The target group for <i>Prosopopeia</i> was primarily that of young to middle-aged adult players who could appreciate hard-core role playing. <i>Prosopopeia</i> was not intended for casual play. <i>Prosopopeia</i> did not, however, require previous experience of larping or role-playing.</p> <p>The selected test group consisted of adults of different ages with earlier role-playing experience varying from zero to extensive. The group was gender balanced as far as possible. The players were chosen in order to create as high-end an experience as possible to explore how intense and immersive a pervasive larp can be. This necessitates picking older and more mature players (than e.g. teenagers). Their larping background was varied on purpose, in order to see whether this type of gaming appeals to hard-core veterans, beginners, or both.</p>
Gameplay	<p>Player Interaction</p> <p>Players interacted by role-playing their characters. This interaction was overall collaborative, but there were dramatic tensions between the portrayed characters. Still, there was no player-versus-player competition. There was player-versus-environment struggle, as players interacted with outsiders, occasionally trying to reach goals. Also, player-versus-GM element was present, as players sought to avoid security guards played by game masters.</p> <p>Game session</p> <p>The temporal expansion of <i>Prosopopeia</i> made the game session very ambiguous. Even though the main event was 52 hours of intense, continuous game play, the game started weeks earlier with mysterious messages sent to players, mostly as nightly voice messages to their cell phones. As the game used the real history as its background, it's practically unrepeatable, as every repetition of the game would need to incorporate earlier games as parts of the past of the new game. Although workarounds could be built, <i>Prosopopeia</i> exemplifies how no game based in real world can ever be repeated (exactly).</p> <p>Outsider Participation</p> <p>Outsider participation in <i>Prosopopeia</i> was mostly unaware and quite trivial and random. The players role-playing have random interactions with random people on random subjects, which mostly rely on interesting coincidences and player creativity. It's up to the player to decide what a catholic writer would say to a Stockholm junkie. Some of the player goals necessitated or encouraged interaction with outsiders: Searching for a person encouraged players to ask outsiders whether they have seen him – whether or not such hints are actually implemented into reality.</p>
Core Features	<p>The core features of <i>Prosopopeia</i> are:</p> <ul style="list-style-type: none"> • The indexical approach to real world as a game space • The possession model of role taking • Technology support for game mastering through surveillance and communication.
Pervasive Features	<p>Spatial Pervasivity</p> <p><i>Prosopopeia</i> was a spatially expanded game. It was played in random areas, and as the players moved around and communicated with the (hidden) game masters, the</p>

	<p>game articulated these areas into the game.</p> <p>Temporal Pervasivity</p> <p><i>Prosopopeia</i> merged ‘in-game’ time with non-playing time in several fashions. Most of this blending occurred before the main event, but through the use of the possession model game time became mixed with ordinary life also during the main phase.</p> <p>Social Pervasivity</p> <p><i>Prosopopeia</i> broke the limits of traditional games socially, by including outsiders into the game in several ways. involvement that has been used before in particular in <i>Uncle Roy All Around You</i>. Some people were actively recruited to play outsider roles. Some outsiders that were recruited for minor tasks were themselves. For example, one person met up with the player team in the middle of the night to give them the key to a boat in a run-down harbour in central Stockholm. The players were also on several occasions encouraged to gather information from complete outsiders who were not aware of the game.</p> <p>Other forms of Pervasivity: Ambiguity of Interaction</p> <p>Due to extremely strong spatial, social and physical expansions, the ‘game interface’ of <i>Prosopopeia</i> was extremely ambiguous.</p>
<p>Other innovation in game design</p>	<p>The Real World as Game Interface design, called the <i>Prosopopeia Proposal</i>.</p> <p>In a city larp such as <i>Prosopopeia</i> it is impossible to create scenography for the whole gaming area. The approach was instead to prop selected locations, where central scenes were to take place – the rest of the area was used as is. In line with the ARG (Alternate reality Gaming) aesthetics of the game, the propped locations were selected to represent themselves. For example, the new age festival that the players visited during the preparatory phase was a real, large new age festival. This propping style, a requirement of the <i>Prosopopeia Proposal</i>, is called <i>indexical propping</i>.</p> <p>The design intention was to enable the players to see each place and each prop in exactly the way it would look to an outsider, while player could recontextualise the observation within the game context. The intended effect to create a feeling where everything is a prop and thus nothing is a prop. One of the core themes of <i>Prosopopeia</i> was to encourage players to look at their everyday environment from a new perspective, finding game clues where none existed and interacting with ordinary world in a game-inspired, free fashion.</p> <p>The use of indexicality in the cityscape allowed <i>Prosopopeia</i> interesting opportunities in designing the dramaturgy and the aesthetic of the space used in the game. Discovery and exploration were central themes. Many of the events in <i>Prosopopeia</i> took place in desolate urban areas, offering the players a tour into the blind spots of urban landscape. This aesthetic was borrowed from the urban exploration movement, for purposes of both adding dramatic tension to the gaming areas, and offering tangible physical action in cityscape. While an ordinary larp design transforms a private place into a gaming area by the use of scenography, <i>Prosopopeia</i> looked for semi-public locations in the urban landscape that already suited the design of the game.</p> <p>Urban exploration is often done in areas where an ordinary person is not allowed to go, and doing so may require avoiding security guards. <i>Prosopopeia</i> exploited this tension related to the forbidden feeling of these areas by introducing game master security guards patrolling some of these areas; for instance the players were expected to sneak into the mental asylum. Even though entering the asylum was legal – since it was rented for the game – the entering was given the tension of trespassing by the introduction of the in-game guard patrol.</p>

<p>Play Modes</p>	<p>During the preparatory phase the game was in a state of dormancy: players continued with their ordinary life activities expecting that the game could contact them at any time. The players were expected to remember the <i>Prosopopeia Proposal</i> if something unexpected happened. When the dedicated game time started, the players were supposed to be ready to become possessed by the ghosts, and actively engage with the game.</p> <p>Due to extremely strong spatial, social and physical expansions, the ‘game interface’ of <i>Prosopopeia</i> was extremely ambiguous. Everything done as part of the game (within the magic circle) was also done outside it and vice versa. It was impossible to take actions that would only be relevant in game context, or actions that would have been only relevant outside game context – something that was a central goal and design principle of the game.</p> <p>The game used a combination of outsider involvement that has been used before in particular in <i>Uncle Roy All Around You</i>. Some people were actively recruited to play outsiders. Some outsiders that were recruited for minor tasks were themselves. For example, one person met up with the player team in the middle of the night to give them the key to a boat in a run-down harbour in central Stockholm.</p> <p>The players were also on several occasions encouraged to gather information from complete outsiders who were not aware of the game. In particular, each character in the game was also given a mission that involved interacting with bystanders. For example, one of the possessing spirits had regrets about the fact that he had abused homeless people when he was alive. He wanted to redeem this by sheltering a homeless person for a night. As the players were playing according to the possession model of role-taking, it was left to their discretion to what extent they actually carried these missions through.</p> <p>The Possession Model</p> <p>Players played diegetic versions of themselves, possessed by ghost characters during the game. This was intended to allow both character-playing and reacting naturally to events not related to the game—like meeting a friend on the street. Thus, the everyday life of a player was taken as it was, changing the ordinary life into game by adding the ghost.</p> <p>Thus there were two game modes in <i>Prosopopeia</i>: possessed and unpossessed. Possessed means that the player acts as the ghost possessing him, essentially role-playing a deceased person who has returned to the lands of living in order to perform certain tasks. In unpossessed mode the player played himself, having suppressed the ghost from his consciousness. He was still expected to treat the game as it was real.</p> <p>Some problems in the game could only be solved by the possessed, as they required information and emotional relationships focal to the ghosts. Others could only be solved by a modern person able to use computers and drive a car.</p>
<p>Game objectives</p>	<p>The objective of the players was to track <i>Ingela</i> and release her from haunting the place of her death by solving the puzzles in the game. <i>Prosopopeia</i> was not a competition, the goal shared by all the ghosts (players).</p>
<p>Game World</p>	<p>The <i>Prosopopeia</i> game world was built and extended from the phenomena called EVP, Electronic Voice Phenomena. <i>Prosopopeia</i> claims that EVP works and that one can through the use of technology communicate with the dead and the other side. Different organisations on the other side were created, all with different agendas in this world. Kerberos the keepers of the boarder between the living and the dead. Zeitstrom, a powerful and mysterious organisation with a hidden agenda. The world is an extension of our own reality, a possible interpretation of daily activities, strongly influenced by spiritualism and technology occultism.</p>
<p>Storyline</p>	<p>The players attempted to release <i>Ingela</i>, who had become a ghost, trapped between our world and the world beyond. As the game progressed, the players gradually understood that the reason was deeply connected to their characters, who all had</p>

	<p>wronged her in different ways.</p> <p>Turns out that she was a medium, a seer who was deemed insane by the Swedish healthcare system, who committed a suicide after being subjected to violence and imprisoned in a mental hospital. The players had to follow clues and obtain information of what had happened, and talk her out of haunting the abandoned asylum in order to succeed in the game.</p>
Graphic Design Theme	<p>The game did not include any graphical theme due to the design goal that it should be completely impossible to tell where the game ends and non-game starts. A graphical design theme would break this illusion.</p>

3 GAME FLOW

Features	The Prosopopeia Game Design
Overview	<p>The main part of <i>Prosopopeia</i> was played continuously for 52 hours. During that time the players followed the trail of the failed agent, discovering hideouts, looking through old documents, talking to strangers, hacking encryption and trying to discover what had happened to their shared friend, <i>Ingela</i>. The journey took them all the way from high tech areas to rundown parts of the town, visiting cemeteries, ruins and rusty dock areas.</p> <p>Finally they found the missing spirit in an abandoned mental hospital, traumatized by rapes and considered insane for being a gifted medium. After the players talked her out of her personal hell, the helpful staff of SICS channelled the spirits out of the hosts.</p>
Entering the game	<p>The main game was preceded by a preparatory phase that used a number of ARG-methods. The preliminary game started with late night phone calls to players with strange distorted voices from the other side, providing clues that pointed at a new age festival celebrating change in the old Mayan calendar. Finally the clues led the players to the Central Station in Stockholm, where they acquired personal files on 12 deceased persons.</p> <p>Piecing the story together, the players came to understand that the previous agent sent to rescue had failed, and looking for him might shed some light to the problem. The voices kept calling the players during the next week, and further scrutiny calendars lead the players to Kista, Stockholm next Friday. They were hooked up to a techno-magical device at Swedish Institute of Computer Science, allowing the twelve dead to possess them.</p>
Switching play modes	<p>The players were able to switch between possessed and unpossessed playmodes at will as described above (play modes).</p>
Entering/Leaving and re-entering the game	<p>Players entered the game through using the Rabbit Hole method of the ARG-used in the preliminary phase. Once the game had commenced, the players were not offered a possibility to exit the game. They were able to push it aside (as described in the possession model, see play modes), but not exit it completely.</p>
Social Adaptability	<p>Social adaptability was provided though the possession model described in play modes above. Even though the game was on for full 52 hours, the players (possession hosts) were able to go about their lives as a part of the game during the events, by suppressing the ghost characters.</p>
Pacing	<p>The pace of the 52-hour main phase was mostly controlled by game masters. They trigger events by providing players with clues, and restrict some activities until proper moments by withholding information. As examples of such triggers non-players might call or email players, EVP ghosts might give interesting bits of information or GM guardsmen might raid the area where the players are. As in any larp, half of the pacing is done by players semi-consciously, so exact control is impossible.</p>
Typical Playing Situation	<p>Five players are travelling by bus in Stockholm, hauling the bulky EVP-recorder with them. They are mostly chatting within the group, of both game-content and non-game content (both ghosts and hosts speaking in a seamless mix). To an outsider the discussion might appear as group of regular people chatting, with some weird undercurrent as they might chat about conducting EVP experiments etc.</p>

4 GAME CONTENT

Features	Not applicable to <i>Prosopopeia</i> .
2D Graphic Design	Not applicable to <i>Prosopopeia</i> .
3D Designs	Not applicable to <i>Prosopopeia</i> .
Interactive Movie Elements	One interactive movie was produced for an initial communication scene. This movie was played in a shop window, equipped with a television set, microphones and loud speakers. The players were lead to this place late in the evening and the television set went on by itself, showing a fragmented video intended to appear as shadowy figures – spirits communicating from the other side.
Sound	The Thanatos ghost voice synthetiziser was used extensively within the game. This equipment enabled the game masters to dynamically generate spoken messages (relayed primarily to the EVP machine) to guide the players in their missions. The sound quality of the Thanatos voices was designed to sound close to the original recordings of EVP messages from the seventies. In addition to the dynamic recording of new messages, Thanatos allowed the game masters to dynamically alter the sound quality and flavour.
Physically prepared locations	<p>Finnboda Varv</p> <p>Finnboda Varv is an old abandoned wharf near central Stockholm. Reconstruction work had started at the time of the game but still several old factory buildings were left. In one of these a stash of important documents were hidden and a simple trap triggering a pyrotechnical effect started burning the documents as the players would entered the room. The only way to enter was through a narrow shaft.</p> <p>Boat at Beckholmen</p> <p>An old fishing boat was rented as serve as housing for the players during the game. Beckholmen harbour is located very central in Stockholm but is known as the harbour of dreams, a lot of the boats there are old boats being renovated, though few have been finished, thus the name Harbour of dreams. The renovation work of the fishing boat had not yet started. A sleeping quarter was prepared as well as a study and a simple kitchen. The feeling the prepared location should communicate to the players that this was a place where someone has lived for quite some time, trying to hide, as a refugee.</p> <p>Kerberos office</p> <p>Kerberos Bevakning was the fictional guard company incorporating the three headed dog Kerberos guarding the gates to the underworld. A small summer hut in a forest in the suburbs of Stockholm was prepared to be the headquarters of the company. Here they non-player characters playing the guards could rest and sleep. The office also played an important role in the beginning of the game when the players had to require the EVP machine that Kerberos had confiscated.</p> <p>Beckomberga</p> <p>The old mental hospital Beckomberga served as the location for the final scene. The hospital was closed down many years ago and has since been abandoned. In the cellar a room was prepared with hints and clues. This room was the place hwere <i>Ingela</i> was supposed to been abused and tortured. Another room on the third floor was prepared to be the room were <i>Ingela</i> committed suicide. Surveillance equipment was hidden and an infrared lamp was mounted in such a way it produced a circle of infrared light marked the spot in the room where <i>Ingela</i> had died. The actual lamp was hidden out of sight and the players required the ghost hunter, a specific game device, to see the circle since infrared light is not visible to the human eye.</p>
Online content	<p>Kerberos website</p> <p>A fictional website for the surveillance company Kerberos Bevakning was setup as means</p>

	<p>to provide both the blurred experience where the game world ends and the real-world continues. It also provided the players with some in-game hints and clues, such as where the Kerberos headquarters was located. Also a number of customers were listed on the site which included places such as the Beckholmen harbour and SICS offices in Kista.</p> <p>Invitation website</p> <p>A website for registering for the game was also set up. Invitations sent out included an individual password that allowed access to the site and made it possible to register for the game. This was the only place where the players were informed that they now entered the game.</p>
--	---

5 TECHNOLOGY USED

Device	Description and Function
The EVP machine	<p>A central component of the <i>Prosopopeia</i> mythos was the link to the EVP paranormal research and Jurgensen’s experiments. This was reflected in the design of the EVP machine; the central technology component built specifically for the event. The EVP machine was an example of ‘technology in disguise’. It was an in-game artefact that implemented a game functionality but must have done so by a looking and feeling as entirely integrated with the game mythos.</p> <p>Function. The primary function of the EVP machine was to implement a communication channel for game masters to the players. Typically, the communication would be within the mythos; the game masters appeared as ghosts communicating with the players. However, the EVP machine also served a secondary purpose: the machine was used for continuous audio surveillance of the game (or at least the players in vicinity of the EVP machine).</p> <p>Form. The EVP machine developed for <i>Prosopopeia</i> was based on the original, “classic”, design of EVP technology. Using a reel-to-reel tape recorder (EVP machine), voices from ‘beyond’ are recorded on the tape and used to create a dialogue with the spirit world. The machine was portable; it was connectable to battery packs so that the players could bring it with them when travelling to the various game locations around Stockholm.</p> <p>Interaction model. The most basic interaction model can be described as follows.</p> <ol style="list-style-type: none"> 1. You start the tape recorder in recording mode. 2. You ask a question followed by a period of silence. 3. You rewind the tape and listen to the sounds recorded. The recording level of the ghost voices was remotely controlled and during the <i>Prosopopeia</i> event it was typically kept at a very low level. To hear the ghost’s answer, you had to increase the sound level. <p>One of the microphone inputs has been modified so the players could connect a device that altered the EVP machine functionality. Once connected there it was no longer needed to rewind the tape and play it back. It was possible to listen to the recordings in real-time. The in-game item was explained as some kind of amplifier or signal processor that enabled this enhanced communication. No explicit instructions were given to the players during the game on how to use the EVP machine, it was considered as one of the quests within the game, to find out how to operate it.</p>

Thanatos	<p>Thanatos was a software synthesiser or effect processor dedicated to modulate the voice of the game master in <i>Prosopopeia</i>. By studying so called "authentic" examples of recorded voices of dead people from the Sixties and Seventies we tried to simulate the qualities (on the rare occasions of quality) from those recordings.</p> <p>Function. To enable ghost communication, the <i>Prosopopeia</i> design relied on the ability to generate ghost-like voices in near real time from spoken input. This was provided by Thanatos.</p> <p>Form. Thanatos software was developed for use by the game masters, which transformed their spoken input into ghostlike voices. It was asset of controls on a Mac laptop connected to a sound mixer to feed the altered sound into the EVP machine.</p> <p>Interaction model. The Thanatos software can be used both to record voice phenomena and to transmit them in near-real time. The game master speaks into a microphone. The voice of the game master is modulated on a computer and can be stored there. The modulated voice is transmitted to a mixer, enabling the sound to be mixed with other sound phenomena, and then either stored on file or directly relayed to the EVP transmitter (a phone).</p>
Audio and video surveillance	<p>The surveillance technology used in <i>Prosopopeia</i> was based on capturing both video and audio through cameras, which are remotely controlled and recorded.</p> <p>Form. The cameras used within the event were not completely consistent with the in-game diegesis. The cameras used at the boat are narratively consistent; Adam, the missing agent, is likely to have surveillance technology installed, but the preferred solution for this would have been very simple technology such as standard web cameras. It was considered by the game masters that it was crucial to be able to view the whole area of the living quarters. Therefore the cameras were remote-controlled and it was possible for the players to see that they moved which broke the consistency with the game diegesis. The budget did not allow for the amount of cameras needed if fixed position cameras would have been used. In the other scenes where the camera equipment was not appropriate for the setting it was hidden.</p> <p>Function. In most scenes, the audio feed was the central resource. Video feed was less important for at least this event.</p>
The Ghost Hunter	<p>The ghost hunter was device given to the players to be able to find the spot where <i>Ingela</i> died. The special electronics in the device enhances the weak signals from the traces that are left in our world when a person leaves this life and enters the after-life.</p> <p>Function. Provide means to see tracks of lost souls, to detect where traumatic experiences have left imprints in our world.</p> <p>Form. Mounted on a metal frame the cathode tube and electronics of a small black and white TV displayed the image from a camera. The camera was mounted at the front of the metal frame and was sensitive to infrared light. Also a battery to power the TV and the camera was fitted at the back of the frame. The whole assembly had a form that to some extent resembled a gun. The easiest way to hold it was to carry it as an extension of one right arm and point it with the left hand. Thus even more resemble a gun.</p> <p>Interaction Model. When turned on the cathode tube from the TV would light up and show a black and white image from the front camera. By pointing the whole device at different directions a room or an area could be scanned for traces.</p>

6 USER INTERFACES & GAME ARTEFACTS

Name	Hardware equipment	Display resolution	Purpose
EVP-mashine	Modified vintage reel-to-reel tape recorder	Analog lamps, LED:s and VU-meters	Communication players / Game Masters
Thanatos	Software for voice modulation	Screen GUI	Transforms GM voices into ghost voices

7 FULL CREDITS

Game content

Pernilla Rosenberg

Adriana Skarped

Game evaluation

Markus Montola

Annika Waern

Lead design

Martin Ericsson

Producation

Staffan Jonsson

Production Assistants

Johan Eriksson

Henrik Esbjornsson

Martin Lanner

Project coordination

Jonas Söderberg

Sound

Jonas Söderberg

Technical implementation

Pär Hannson

Karl-Petter Åkesson

Text writing

Linus Andersson

Emil Boss

Holger Jacobsson