

# *Shakespeare Machine Project*

experimental platform /  
Objects / situations / audio-visual tools



*Consultation Armchair* at *CostumeGris /Prosecution Exhibits*, 2004, galerie michèle chomette, Paris

# Introduction

**An assistant in audio-visual writing, which translates texts into film sequences; a semantic bridge between natural language and moving images.**

*Shakespeare Machine* is a system and an instrument for the creation, production and utilisation of audio-visual material. This project displaces the ideas of an author, a director and a viewer, and sets up a new situation of language and writing that deals with our relationship to sense, so as to provide a means of action in the current environment: hyperfilm.

*Shakespeare Machine* involves a team of a dozen people, with an inner core of five. The research phase of the project led to the production of numerous objects: the short films *ShareMonsieur 1-5*, the novel *Strangely Alone*, the *Consultation Armchair*, and sequences for the film *CostumeGris*.

We are currently working on two objects – the films *CostumeGris* and *CineJigsaw* – which are providing us with a better grasp of the semantic problems generated by our system, and allowing us to attain the first stage in our operational development of artificial intelligence: *Shakespeare Machine*, which understands what it is told...

A demonstration, using a model, will take place in March 2007 at the Michèle Chomette gallery and Eof gallery in Paris.

## **JPPClub**

*Research & development*

*Julia Tabakhova*

*Pascal Faivre*

*François Delévaque*

*Boris Ramonguilhem*

*Jean Pascal Princiaux*

Collegial hypermedia work. The guests, often artists, contribute according to their affinities (conceptual or formal) with the project, and not in terms of any precise technical skill. This type of organisation proved to be highly compatible with the prevailing environment, semantically as well as technologically.

|   |    |
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### **Appendices (CD Rom)**

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| <i>CostumeGris</i> film file                         |
| <i>Shakespeare Machine</i> technology file           |
| <i>Shakespeare Machine</i> Project file              |
| Texts and documents                                  |
| Extracts from the films <i>ShareMonsieur 3, 4, 5</i> |
| Extracts from Russian fairy tales                    |
| Extracts from 007                                    |

### **Preliminary screenings**

|   |
|---|
| The films <i>ShareMonsieur 1-5</i> , 2000-2004                  |
| The exhibition <i>CostumeGris / Prosecution Exhibits</i> , 2004 |
| <i>Paradise</i> , Pink TV, 2005                                 |

### **Partners**

|                                 |
|---------------------------------|
| Loca-Images                     |
| Galerie michèle chomette        |
| Eof gallery                     |
| SquareBox                       |
| Corman technologies             |
| Ecole d'Arts de Rueil-Malmaison |

### **Support**

|                                     |
|-------------------------------------|
| Centre National des Arts Plastiques |
| Ville de Paris                      |
| Conseil Général de l'Essonne        |

# Key concepts

## **Magic lantern**

*Shakespeare Machine* links up documents of varying origins in a subtle way. It is a female machine that produces Proustian madeleines – an audio-visual "pen".

## **Environment**

This is an interface in a natural language that handles direct, intuitive behaviour in a writing situation, or filmic distribution. The system functions as propositional intelligence, increasing availability to the language game: it invites the thinking process to exercise itself in audio-visual language, and provides a means of navigation in a sense (and thus for *the senses*) that is appropriate to digital culture.

## **System**

*Shakespeare Machine* is a software-hardware system for the manipulation of audio-visual objects. It is independent of existing operating systems. It makes relevant proposals, and has high-level capabilities for learning and adaptation to projects and users.

In the long term, the implementation of automatic functionalities for the acquisition of meta-data (the detection of forms, facial recognition, spectral analysis, etc.) will enrich this phenomenon in a decisive way.

It is the quality of the response that is favoured, for an environment of innovative, living, investigational writing, taking full advantage of the flexibility of digitised audio-visual material.

## **Artificial intelligence**

*Shakespeare Machine* is a modular, cooperative, connectionist system. It is based on Marvin Minsky's "microwaves" and "frames", using fuzzy logic, and is programmed in *LISP*, with a pool of data and a contextual engine.

It is founded on the concepts of equilibrium (faced with the unpredictable, it seeks a solution) and utilisational context. Everything that happens is taken into account in a search for a solution, whether immediate or subsequent.

## **Relevance**

The relevance of the system is based on a method of characterisation (see following page) of audio-visual objects that become "language bricks", and the operator's activity – the context of utilisation.

A protocol of contextual interaction between these characters gives rise to a system that can generate pertinent audio-visual proposals; and this pertinence increases as the activity evolves.

## **Development**

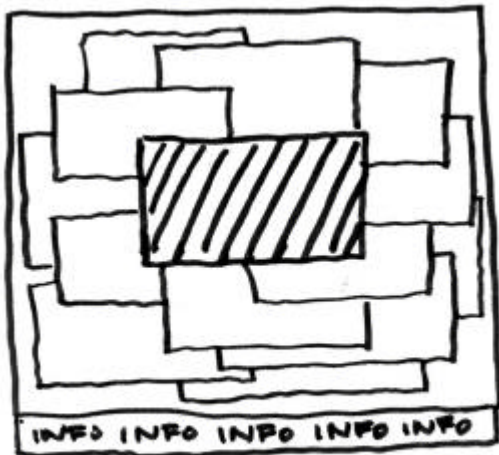
The conception and development of *Shakespeare Machine* are modular, and occupy a concrete space with several underlying media: games, film, tools.

# Interface components

Transformation of audio-visual fragments into language bricks:

| Level of Abstraction | Characterisation |   |   |
|----------------------|------------------|---|---|
| 1/ Dynamics          | <b>Pace</b>      | Intensity or speed  | 100-300                                   |
|                      | <b>Value</b>     | Broader or narrower framing   | 100-300                                   |
|                      | <b>Direction</b> | In which I am led   | 0-12 hours                                |
| 2/ Ambience          | <b>Openness</b>  | Does this element tell me something precise, or, in fact, several things? | 100-300                                   |
|                      | <b>Tension</b>   | Does it tickle me, or does it scratch me?                                 | 100-300                                   |
|                      | <b>Context</b>   | Where and when  | Interior/exterior/<br>day/night/editorial |
| 3/ Narration         | <b>Subject</b>   | That which is seen  | Nominal groups                            |
|                      | <b>Action</b>    | That which is literally done  | Verbs                                     |
|                      | <b>Discourse</b> | The impression, the type of situation                                     | Noun, common name                         |

Synergy with the data system:



*Selecteur de Propositions*

# State of the project in 2007

## Recapitulation

A robot that makes films. Cutting up audio-visual material – film, rushes, sound, images – into re-assemblable objects, describing and characterising them to make audio-visual language bricks. Programming an artificial intelligence that understands the sense of these fragments, which are able to respond to a natural language narrative, through an appropriately-arranged and written audio-visual sequence.

## Programming

We are working, for the moment, on two objects of experimentation:

*CineJigsaw* (*Magic Desk*, Russian fairy tales and James Bond), and de-rushing (the film *CostumeGris*). These two developments allow us to circumvent the semantic problems that are dealt with by our system, and to achieve a broader involvement of the partners and audio-visual situations.

*CineJigsaw* also corresponds to the first stage of operational development of artificial intelligence. It allows us to validate our principles of comprehension, in natural language, between the individual and the system. We are at the first stage of operational development of artificial intelligence. This primary nucleus is a system of semantic groups, regulated in a schematic way, and programmed according to a fuzzy-type logic in an interpretive language (Lisp).

We know (once again, in an operational way) how to characterise the audio-visual material. And we are homing in on a method of characterisation using meta-data: spectral analysis and form recognition...

## Production

A prototype of Russian fairy tales, namely a *CineJigsaw* entitled *Magic Desk*, is being produced. The films in question are in the course of digitisation and characterisation.

*James Bond Shaker* is currently being defined, on the basis of a sample, i.e. *On Her Majesty's Secret Service*, which is also in the process of characterisation.

The filming of *CostumeGris* is more or less complete, and the characterisation process has begun. The filming itself was successful: the direction and filming were under simultaneous control. The methods used were efficacious: the characters are captivating; the reality effect is disturbing; most of the filmic material is of high quality, and highly versatile. As a result, thanks to mixing with other sources, the amplitude of *CostumeGris* will be considerable, its dynamics of monstration will be wide-ranging, and the palette of reality levels will be extensive. The intimate link between this film and *Shakespeare Machine* is now confirmed. *CostumeGris* is already proving a useful laboratory.

## Prospects

After the interfacing, our nucleus will be ready for use by the non-initiated. It is to be the object of a demonstration, in an exhibition framework, at the Michèle Chomette gallery, Paris, as a model of artificial intelligence – *Shakespeare Machine*.

The second phase of development will consolidate the common core of the film and *CineJigsaw*, before providing it with the learning ability necessary to a writing situation. From the schematic functionality of the first stage, we shall pass on to situations of concrete collaboration between the system and real people. This second phase will be instantiated by the film *CostumeGris* and the ongoing developments of *CineJigsaw*.

# Articulations

*Shakespeare Machine* is an audio-visual writing assistant that translates texts into film sequences – a semantic bridge between natural language and moving images.

*CineJigsaw* is a game. Starting with a box full of small pieces of films, you make up your own stories as you tell them to the box... The functionalities to which this protocol corresponds are sufficient and necessary to the primary software node. *CineJigsaw* is the technological and institutional antichamber of *Shakespeare Machine*.

*James Bond Shaker*:  
Bond belongs to all of us.

*CostumeGris* is an experimental feature-length film – a laboratory-film of *Shakespeare Machine*. The writing took place after the filming, using audio-visual techniques. It is a direct, subjective film, on selected levels of reality.

*Russian Fairy Tales*: the same entities, the same characters and the same actors come back once again. They are combinatory forms, perfectly adapted to new, flexible, non-linear, open, labyrinthine fables. Between the collective, fantastical orality of the middle ages and contemporary techno-individual vertigo...

*Magic Desk* is a distributive receptacle – a narrator. Its potentiometers and adjusters of recital allow one to make requests, to influence the unfolding of a broad, abstract, permanent narration. These adjustments bring about a subtle negotiation process: the image box palpitates...

# ***CineJigsaw***

*(CinéPuzzle)*

*Once upon a time, in the garden of the Audio-visual, that is to say the land of diamonds, there was a world of the screen, of the interface and duplication. The terrain of the mirror game, television, virtual reality, new technologies, networks, illusion, delirium, psychotropes – a cyberdiamond world...*

*CineJigsaw* is a game. Starting with a box full of small lengths of film, you make up your own stories as you tell them to the box...

- \* ***Magic Desk / Russian Fairy Tales***
- \* ***James Bond Shaker***

## **Issues**

*CineJigsaw* provides a platform from which to attain the first level of operational development of artificial intelligence. It corresponds to the necessary and sufficient functionalities of the first software core, and thus the visibility of results in the short term. And this means that it becomes possible, early on, to open up the project onto the team's initiatives, and to take in hand a more extended range of content, and authors' projects.

Technically and institutionally, *CineJigsaw* functions as an antichamber to *Shakespeare Machine*.

# CineJigsaw

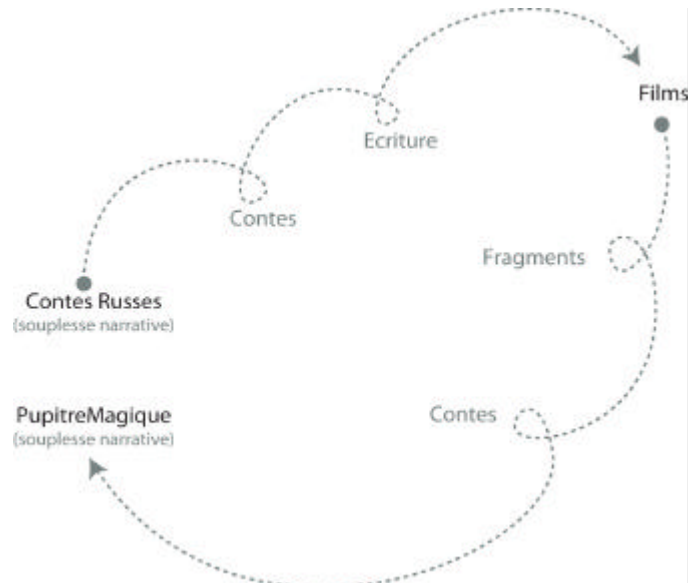
## Magic Desk / Russian Fairy Tales



In this version of *CineJigsaw*, the articulable fragments of film are segments of fairy tales drawn from Russian folklore and legends, as transcribed by Alexander Pushkin and adapted for the cinema by A. Rew and A. Pschutko. Pushkin's writing, in these tales, also took place after the production – after he had been impregnated with them by Arina Rodionovna, his nanny.

|                   |       |           |       |
|-------------------|-------|-----------|-------|
| Russian tales     | Tales | Writing   | Films |
| <i>CineJigsaw</i> | Films | Fragments | Tales |

Among these films, there is a recurrence of the generic components of fairy tales: Baba Yaga / witch, Katshei / magician, princess, hero, witch's house – and actors playing other key characters, either alternately or throughout. These fairy tales (given that the same entities, the same characters and the same actors keep coming back time after time) are combinatory forms that are perfectly suited to *CineJigsaw*, and to new, flexible, non-linear, open, labyrinthine fables.



**Between the collective, fantasy-based orality of the Middle Ages and our contemporary techno-individual vertigo.**

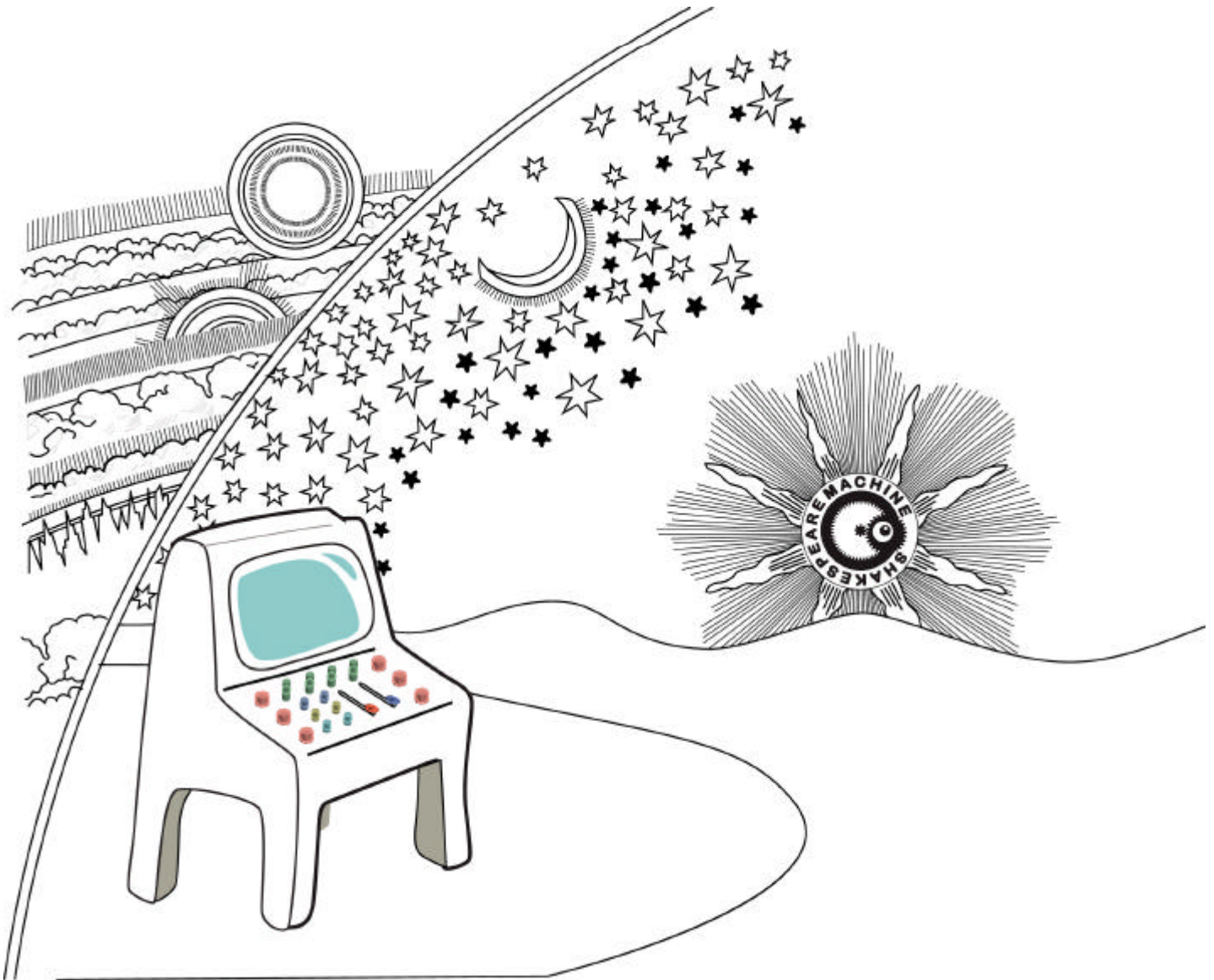
# **CineJigsaw**

## **Magic Desk / Russian Fairy Tales**

*Magic Desk* is a receptacle-disseminator of fairy tales – a narrator. Its potentiometers, as adjusters of narration, are conducive to requests, and to influences on all sorts of narrative directions, in the unfolding of a large, abstract, permanent tale. These adjustments launch a subtle form of negotiation: the little box of images palpitates...

*Magic Desk* is an intelligent toy – a *CineJigsaw*, a box full of short lengths of film. Stories are directly modelled by adjusting the potentiometers on the desk...

*Magic Desk* alludes to orality – an enchanted orality in which the narration, the writing, takes place in a non-premeditated relationship between the storyteller and the audience, playing with fictional blocks, archetypes and motifs. It also alludes (albeit seemingly contrariwise) to a currently-popular form of musical writing, namely that of the DJs – the mix.



## CineJigsaw James Bond Shaker

**Bond belongs to all of us.**

1. Putting a dramatic pre-credit before the story
2. Using and abusing gigantic, spectacular settings.
3. Including half a dozen surprise effects in each film.
4. Pitting Bond against a refined, devious, megalomaniac baddie.
5. Providing the latter with a disturbing, bizarre henchman.
6. Recruiting the largest possible number of pretty girls.
7. Ending up with Bond accompanied by a member of the opposite sex.

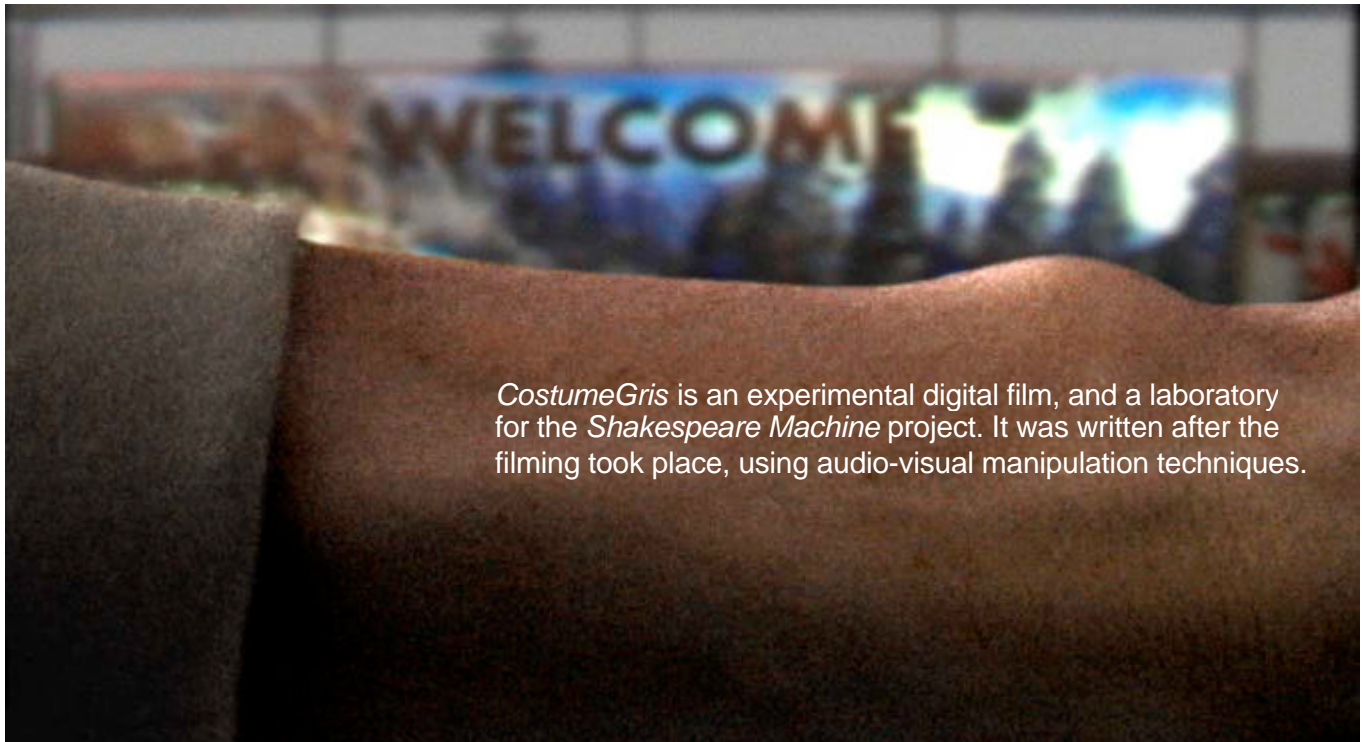


"In 1965, when the cinema was a social phenomenon, Oreste Del Buono and Umberto Eco published a pioneering book, *Il Caso Bond* (Milan, Bompiani), which deciphered the narrative structures of Ian Fleming's novels. In 1980, in Denmark, Gerard Lehman demonstrated the filiation of James Bond with ancient and medieval heroic literature in *James Bond: Mythical Hero* (University of Odense Press). Some studies have been done since then, mainly in the English-speaking world, but the literary James Bond does not seem to have received the academic attention he deserves. As to the cinematographic James Bond, although the series, going back forty-three years, is the longest in the history of the cinema, and has survived the end of the cold war, it is not considered a legitimate object of study, at least in France. And yet, from the 1962 *Dr. No* to the upcoming *Casino Royale*, it could be said that these films (like the novels before them) give excellent glimpses into the cultural history and development of our societies, and that their aesthetic singularity would warrant re-assessment. If James Bond belongs to contemporary history (and the popular forms it has given rise to), a part of this history belongs, in turn, to him."

International conference: *Cultural History and Aesthetic Aspects of a Popular Saga*, Paris, 2007

# *CostumeGris*

(GreySuit)



*CostumeGris* is an experimental digital film, and a laboratory for the *Shakespeare Machine* project. It was written after the filming took place, using audio-visual manipulation techniques.

# Intention

## CostumeGris

*Jean is in the bedroom.*

*To illustrate this on screen, let us consider that the bedroom has to be shown, with Jean in it. Solution A: to film Jean in the bedroom. Solution B: to introduce an image of Jean into an image of the bedroom. Given a digital environment, Solution B is possible, and the writing can be done after the filming, or indeed without any filming taking place.*

**Intention:** to make sure that *Shakespeare Machine* is in keeping with the projected object, as an instrument to slide over language. This does not involve a translocation of the cinema into a museum (even if only *extra muros*), but rather an appropriation of the medium: using its techniques, setting up a controlled, pre-inscribed situation, a defined space – light, depth of field, framing – so as to draw the visitor into a pseudo-fiction that works on an impression of narration. A temporal texture, a sequence of signs, a set of limits applied over a certain period of time, with the question of the end-point.

**Purpose:** to manipulate causality, to smooth out the surface of contact, to increase the distance between the viewer and the work, and, as Charles de Gaulle said, "to move forward into the trophy zone".

|                        |                       |                                |                       |
|------------------------|-----------------------|--------------------------------|-----------------------|
|                        | <i>Cinema</i>         | <b><i>Snuff fairyhood</i></b>  | <i>Snuff</i>          |
| <i>Project</i>         | <i>Writing</i>        | <b><i>Intention</i></b>        | <i>Idea</i>           |
| <i>Production</i>      | <i>Execution</i>      | <b><i>Material</i></b>         | <i>Acquisition</i>    |
| <i>Post-production</i> | <i>Completion</i>     | <b><i>Writing</i></b>          |                       |
| <i>Screen</i>          | <i>Verisimilitude</i> | <b><i>Genres confusion</i></b> | <i>Reality effect</i> |

*The world cannot be divided up.*

The world as a structure that will "introduce" the visitor into a space; a certain distance from sense. The task of the characters is to define it. The main character, who wears a grey suit, is transparent. He is not seen: the camera is subjective.

The only psychology is that which each individual contributes. And indeed this is the main point – to draw in the spectator, alone. The others -the characters) are of no help to him, as they oscillate between real life and the special effect, turned away from themselves, inaccessible. There is no connivance, just attraction.

It is a situation that is hard to interpret, a mental trampoline more than a script; a kaleidoscope of possible meanings that play on false memories and otherness rather than comprehension. The Other is not projected, written, constructed. He is captured, won over, to some extent detached from any landmark. Outside his lair. *I'll be waiting for you at the exit.*

*CostumeGris* is fairylike and snuff. It has no truck with psychological realism, but tackles the insignificance and crudity of real situations transposed into an open phantasmagoria, an *N*-dimensional space in which causes and effects do not necessarily coincide. *CostumeGris* raises questions concerning levels of reality.

# Film

## **CostumeGris**

Digital film, 100 minutes

*"Looking through the eyes of a 21st-century man – a quite extraordinary man, at the centre of a world..."*

Somewhere between Michel Houellebecq's *Plateforme* and Bret Easton Ellis's *Glamorama* lies a fiction/reality combination: *CostumeGris*. Look out – you are entering a sphere of double lives, with a high risk of coincidences. The characters do not quite act. They are deflected from their real existence, their private lives.

*CostumeGris* takes place at the threshold of the innermost heart.

The making of this film has been somewhat unorthodox. The writing took place after the production, using the methods defined by the *Shakespeare Machine* Project: mixing, collage, furtive sense. The narration is elusive, and the material heterogeneous. It is impossible to get a fix on it... The zone of exchanges between private life and the world: this is the terrain that is common to *CostumeGris* and *Plateforme*. They also take the same form: the mix. On the other hand, *CostumeGris* does not merely dress up the reassuring, determinist skeleton of a tragedy; it applies this logic to the entire structure of the narration.

Thus vertigo and uncertainty are at the same time the object and the substance of the film. The void does not lead to another void, but to the unknown.

### **Synopsis**

*The authorities are looking for something – hidden – somewhere...*

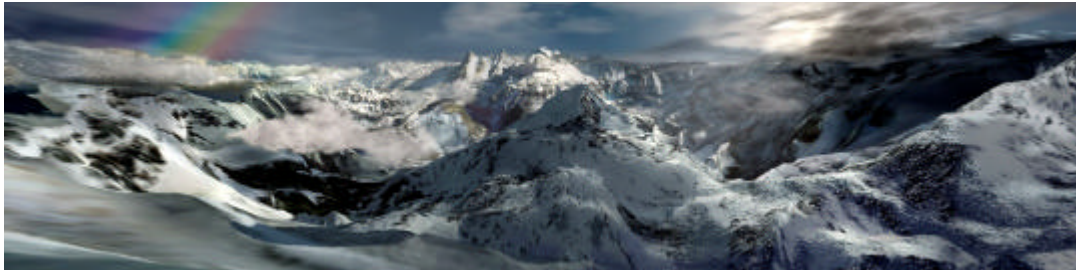
He didn't have much to do with his neighbours at the hotel-club... Just enough to observe them, and to pick out the particles of fiction that pervaded the ordinary.

Upon his return, on the other hand – a body in the silo, his second home! The dead man and the investigating agent (he's almost sure) were at the hotel-club. Right away he calls the girl – Silvie – whom he'd hesitated to move in on. And instantly – wham! And then the others in the hotel-club, who reappear, slyly... But anyway it's Silvie's job to seduce the coincidences; to find a way of no longer filling hotels by chance...

But the other one – the Lausanne blonde – what's she got against him? Why *him*? Did something go wrong?

### **Unframing**

The opposite of reframing – a semantic shell game. To go from one film to another in a virtual camera movement, with the possibility of creating a space in  $N$  dimensions.



### **Hotel-club**

This part of the film takes place in Malta, in an indeterminate exotic ambience. It is a decisive scene, a Gordian knot in the network of characters. They all make unremarkable appearances, but then burst back in later, unnerving. This scene is significant from every point of view. It was filmed on location at the New Dolmen hotel-club in Malta. Eight people are staying there. They know one another only slightly, if at all. Most of them play the same card game, *10,000 Bornes* (see the appended *CostumeGris* film file). This episode was exhaustively filmed with a hand-held camcorder in such a way as to produce a large amount of material that would be malleable and open-ended. The situations, actions and dialogues were determined by the real context.

In the course of the subsequent writing, accompanied by computer-graphic manipulations and combinations with other sources (brochures, films, photos, etc.), this audio-visual material was integrated into the fictional field of *CostumeGris*.

### **Swissminiatur**

The concentric exoticism of Switzerland is the territory of Blanche, the strange attractor of the film. A fake bucolic landscape. The blonde from Lausanne is in her element; she adores blowing things up with Semtex. She runs around contacting her henchmen, killing John Armleder, planting bombs here and there, as aircraft fly through sliding doors in the mountainside.

### **Painstakingly prepared**

*CostumeGris* is structurally distinctive, a world away from conventional cinema. Given that its writing did not precede its filming, it required an embryonic implementation in order to be explicitly formalised. And this file presents a carefully-prepared object:

Five short films *ShareMonsieur 1-5*, broadcasted by *PinkTV*, 2005.

An interactive distribution system, the *Consultation Armchair*, at *CostumeGris /Prosecution Exhibits*, 2004, galerie M. Chomette, Paris

The novel *Strangely Alone*, PPT / Editions, Paris.

This contributed to the definition of the working methodology, and led to the informed evaluation of the hypotheses behind the initiative.