

POL. A Mechatronic Show

Marcel-lí Antúnez Roca

POL is a tale told in the form of a mechatronic show: an ironic and poetic fable for all audiences. An interactive story, a product of the dialogue between machines and performers. A new form of technology, a mutation of stage production.

Although inspired in the genre, *POL* isn't a reworking of any particular popular tale. The story of *POL* traces the perilous journey of a rabbit in search of love. The loss of his teeth, a biological accident of his infancy and physiological change akin to that which the body undergoes in other stages of life, emerges as one of the leitmotifs of the odyssey. His quest for love is another. *POL* is staged in a rectangular space bounded by three vertical screens at the back and the computer system on the sides at the front. Four robots and two *dressskelitized* performers provide the action on stage.

The kinetic backdrop is made up of three vertical backprojections, creating a wide-screen image. The visual universe is made up of two- and three-dimensional interactive images. The robotic automatons are made of animal skins, plastic and metal. With the exception of Cervosatán, who moves autonomously, they are fed through cables connected to the computer system. The robots are included in the fable's cast of characters.

The *dresskeletons* translate the movements executed by the performers and send them via radio modem to the computers, which in turn control the image, sound and robots. A development of the prototype used in *Afasia* from 1998, the *dresskeleton* is the system's chief interface. It is equipped with on/off switches, mercury switches (signalling position), a selecting switch, level potentiometers and a microphone.

In some scenes the performers' voices are used as level sensors, the volume generating or deforming certain images.

The interactive and interdisciplinary grammar of *POL* is made possible by our own software written specifically for the show. The program allows the sensors to be linked to the variables of image, sound and robots. Through this program, a sort of editor, the more than seventy sensors on the *dresskeletons* and totems are linked up with commercial programs and MIDI protocols.



POL examines the specific arguments that technology brings to artistic discourse and its means of representation. The use of such concepts as juxtaposition, synchrony and interaction permits a new form of narration. As in *Afasia*, the interaction in *POL* is at the service of the story. Other interactive forms pursue different objectives—in videogames, for example, where interactivity provides the means to overcome obstacles, or on the Internet, where interaction is the engine for information exchange. None of this happens in this performance.

The interactive narration in *POL* occurs on a broad and specific platform. The interface prototypes—*dresskeleton*—tend to generate a specific body action, quite different from the other interactions—mice, keyboards. The body expands in a cause/non-effect relation towards such new means as robots or inter-



active image and sound. An arm movement can determine things as arbitrary as the modulated frequency of a sound, the horizontal direction of a virtual landscape or the speed with which a robot moves.

This mechatronic event is the foundation of the interactive drama. The spoken dialogue underpinning traditional drama is either relegated to a secondary plane or disappears. The drama is a chain reaction that links body, interface, computer and setting in interactive dialogue. And this discourse juxtaposes gesture, apparatus, noise and icon, engendering a new form without known standards and offering vast potentials. The story emerges from the means that the executor anticipates from his interface, administering a torrential flow of information. And thus flows the fable. The interaction in *POL* doesn't produce random events, but rather a malleable, entertaining and flexible narrative line. And, hopefully, a cathartic rite.

POL has been awarded a Honorary Mention at Prix Ars Electronica in the category "Interactive Art".

POL

Direction & Conception: Marcel·lí Antúnez Roca / Performers: Piero Steiner & Marcel·lí Antúnez / Virtual performer: Silvia García / Music: Alain Wergifosse / Robots: Roland Olbeter / Computer Graphics Head: Alvaro Uña / Software Head: Jesus de la Calle / Photo: Darius Koehli / Costumes: Josep Abril / Lighting: Ramón Rey / Dresskeletons: EBA-studio (Christian Konn, Carlos Jovellar, Dani) / 3D Studio: SU-Studio (Marko Brajovic, Richard Porcher, Stefanie Alice Vandendriessche & Luka Brajovic) / Technical Head: Paco Beltran / Scene assistant: Joan Baixas / Management: Marta Oliveres—*MOM* / Production Head: Dietrich Grosse—*MONDIGROMAX* / Computer graphics: David Aja, Marcel·lí Antúnez / Flash animation: Nacho Vilaro, Eva Vázquez / Flash Editing: Angelika Orf, Gaetano Mangano / Video & 3D graphics: Nicolás García Graphics assistants: Marcelo Dematei, Gerard Bosch, Silvia Adell, Lluís Alba y Cristina Torron / MIDI software: Eugenio Tisselli / Flash sound: Mito Colom / Story: Marcel·lí Antúnez Roca, Luís Miguel Rubio Software assistant: Joan Coll / Hard communications: Jordi Montoya & Esteva Amo / Midi file robots: Sebastian Harms / Sculpture animals: Esterina Zarrillo / Atrezzo, puppet: Nico Nubiola / Administration: Toñi Santos

Image Bank

Make up: Gema Planchadell & Samanta Crescente. Light Technician: Ramón Rey & Carlos Lucena. Operator: Antoni Anglada, Camera Laura, Sigon Atrezzo, Nicolas Nubiola, Assistant Nicolas, García Fernández. Sound Technician: José Ignacio Ortuzar. Direction assistant: Maria Torrent. Thanks to: Begoña Egurbide, Adelaida Antunez, Alvar Antunez, Gori Casas.

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