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Life Spacies II
Espacios de vida

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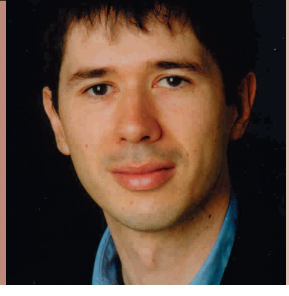
Life Spacies II es un entorno de vida artificial interactivo en el que los usuarios pueden crear criaturas artificiales tecleando mensajes de texto. El movimiento constante, la alimentación, el apareamiento y la reproducción de las criaturas dan como resultado un sistema complejo que se caracteriza por las complejas interacciones entre las criaturas, al tiempo que, tanto ellas como los usuarios, se basan en el texto escrito como fuente principal de información (genética): el arte como proceso viviente.



Life Spacies II is an interactive Artificial Life environment where users can create artificial creatures by typing text messages. The constant movement, feeding, mating and reproduction activities of the creatures result in a complex system that features complex interactions among creatures as well as users and creatures based on written text as a primary source of (genetic) information: Art as a living process.

De acuerdo con Noam Chomsky, la adquisición del lenguaje humano se fundamenta en la existencia de una gramática universal que está genéticamente incorporada a la mente humana de cualquier niño normal y gracias a este mecanismo aprende, de manera natural y aparentemente sin esfuerzo, su lengua materna[1]. Fue también Chomsky el que acuñó la frase: "las ideas verdes incoloras duermen furiosamente". Pese a que, tal como señaló Chomsky, se trata de una frase gramaticalmente correcta, su significado no es aprehensible estrictamente mediante la lógica. Tomando esta frase como inspiración, desarrollándola sobre la idea de utilizar el lenguaje como un código genético y traduciendo las palabras o frases a formas visuales, hemos creado un sistema interactivo para Internet denominado *Life Spacies* [2] y una versión actualizada denominada *Life Spacies II* [3].

According to Noam Chomsky, human language acquisition is based on a universal grammar that is genetically embedded within the human mind of all normal children, allowing them to learn their native languages naturally and seemingly effortlessly [1]. It was also Chomsky who coined the phrase of "colorless green ideas sleep furiously." Though this sentence, as Chomsky has shown, is grammatically correct, its meaning cannot be grasped through logic alone. Inspired by Chomsky's sentence and based on the idea of using language as a genetic code and translating words or sentences into visual forms, we have created an interactive system for the Internet, called *Life Spacies* [2] and an updated version, called *Life Spacies II* [3].

Life Spacies II es un entorno de vida artificial en el que los visitantes de la instalación pueden crear formas de vida artificial. La interfaz gráfica de usuario es una página web en la que los participantes escriben mensajes de texto para crear criaturas o introducen caracteres de texto para alimentarlas. El software "editor de textos a formas"diseñado específicamente para esta instalación, traduce los mensajes de texto a formas artificiales tridimensionales (=criaturas) que cobran vida en una gran pantalla de proyección.
El "editor de textos a formas"[4], mediante el que un texto escrito se convierte en el código genético de una criatura, se basa en la idea de relacionar los caracteres y la sintaxis de un texto con unos parámetros específicos en el diseño de una criatura.

Life Spacies II is an artificial life environment where visitors to the installation can create artificial life forms. The graphical user interface consists of a web page where users can write text messages to create creatures or release text characters to feed the creatures. Our specifically designed "text-to-form editor" software translates the text messages into three-dimensional artificial life forms (=creatures) that come alive on a large projection screen. The "text-to-form editor"[4] that translates the written text of a text message into the genetic code of a creature.

De forma parecida a como actúa el código genético, las letras, la sintaxis y la secuencia de texto sirven para codificar determinados parámetros en las funciones del diseño de la criatura. Los parámetros de texto y sus combinaciones influyen en la forma, la configuración, el color, la textura y la cantidad de una serie de órganos y miembros [4].

El movimiento constante, la alimentación, el apareamiento y la reproducción de las criaturas dan como resultado un sistema complejo de interacciones que sigue pautas de evolución artificial, al seleccionar a las criaturas más rápidas. Además, las decisiones de los usuarios respecto a cómo escribir los mensajes de texto y cómo alimentar a las criaturas añaden constantes cambios al sistema. Como resultado se crea un sistema complejo caracterizado por las múltiples interacciones entre las criaturas.

El proyecto es un desarrollo de ATR Media Integration and Communications Research Lab, Kioto, Japón.
Apoyo en programación: Roberto Lopez-Gulliver.

The "text-to-form editor" is based on the idea of linking the characters and the syntax of a text to specific parameters in the creature's design. In a way similar to the genetic code in nature, letters, syntax and sequencing of the text are used to code certain parameters in the creature's design functions. The text parameters and their combinations influence form, shape, color, texture and the number of bodies and limbs. [4]

The constant movement, feeding, mating and reproduction activities of the creatures result in a complex system of interactions that can display the features of artificial evolution with selection favouring faster creatures. Additionally, the users' input decisions on how to write the text messages and on how to feed the creatures also add constant changes to the system. As a result, a complex system is created that features complex interactions between creature, and creatures.

This project was developed at ATR Media Integration and Communications Research Lab, Kyoto, Japan.
Programming support: Roberto Lopez-Gulliver.

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Christa Sommerer /Laurent Mignonneau
are internationally renowned media artist working in the field of interactive computer installation. They currently hold positions as Associate Professors at the IAMAS International Academy of Media Arts and Sciences in Gifu, Japan and as Professors at the University of Art and Design in Linz, Austria.
Sommerer and Mignonneau collaborate since 1992, their interactive artworks have been called "epoch making" (Toshiharu Itoh, NTT-ICC museum) for pioneering the use of natural interfaces to create intuitive and natural interaction and for linking dynamic and evolving image processes to user interaction parameters. Their collaboration has been influenced by the combination of their different fields of interest, including art, biology, modern installation, performance, music, computer graphics and communication.

These works have been shown in numerous exhibitions world-wide and are permanently installed in media museums and media collections around the world, including the Media Museum of the ZKM in Karlsruhe, Germany, the NTT-ICC InterCommunication Center in Tokyo, the CARTIER Foundation in Paris, the Millennium Dome in London, the Tokyo Metropolitan Museum of Photography in Japan, the AEC Ars Electronica Center in Linz, Austria, the NTT Plan-Net in Nagoya, Japan, Shiroishi Multimedia Art Center in Shiroishi, Japan and the HOUSE-OF-SHISEIDO in Tokyo.

Sommerer and Mignonneau have published numerous research papers on Artificial Life, interactivity and interface design and lectured extensively at universities, international conferences, and symposia around the world. They hold a PhD degree from CAiiA-STAR University of Wales College of Newport, UK. Mignonneau and Sommerer have organized workshops and invited sessions at various international conferences, such as SCI2001 (Orlando, 2001), KES2001(Osaka, 2001), AlifeVII (Portland, 2000), KES2000 (Brighton, 2000) and ART-Science-ATR (Kyoto, 1997).

Sommerer is also an international Co-editor for the LEONARDO Journal, MIT Press and in 1998, together with Laurent Mignonneau, she edited a book on the collaboration of art and science called "Art@Science," published by Springer Verlag Vienna/New York (ISBN 3-211-82953-9).