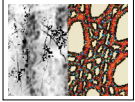


“hippoCAMPus”

*MEMORY, CONSCIOUSNESS, IDENTITY.
CELLULAR AUTOMATA, DATAGRAPHIC* OBJECTS.*



Giulio Camillo, an Italian from the 16th century, dedicated his life's work to a model which was meant to facilitate memorisation, i.e. learning by heart. Using visual symbols, he created that model as a “memory theatre” which he unfortunately never finished. One major protagonist in this model is Prometheus who stole the holy fire and taught humans the knowledge of the gods, all the arts and sciences.

The hippocampus is located on the interior rim of the temporal lobe and plays a major role in the processing of thoughts. It stores and processes newly-acquired information for merely weeks or months and then relays them to corresponding areas of the cerebral cortex for long-term storage. According to current belief, these stores are later used by the “random access memory” of the anterior cerebral cortex. Although new details are continually being explored, science is still far from a comprehensive explanation on how we memorise.

Every person's identity is based on his or her past, on the one hand on memories, above all on their interpretation. On the other hand, however, consciousness and activity require a subtle co-operation between memory and genetics. The interpretation of the things experienced alters in the course of a lifetime. This means that the past is not a fixed asset, but a continually changing process within the consciousness taking into account also the present.

Whereas programming freaks working on “neuronal networks” are trying to use the brain's bio-systems to create “artificial intelligence”, neurologists are enjoying the latest possibilities offered by computer-assisted models of thought. – The problem of artificial intelligence has become a philosophical issue, as clearly emerges from the arguments put forward by supporters and opponents. Both eventually tend to ask whether the human being in itself is not some kind of machine. Did Prometheus conceal something from us?

(Georg Mühleck, The Highlands, Scotland, August 1998)

* The term "datagraphy" was introduced by Georg Mühleck in 1992. It includes all computer generated art – or by means of computer emerged work of art, which can be presented on a two-dimensional plane (display by monitor, projection, prints of all kinds).

Printing Technology (tents)

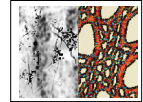
The "hippoCAMPus" (tent) series is printed on a Stork TCP 4002 in The Netherlands. The technology is based on the principal of jetting ink under high pressure through a small nozzle with a diameter of 12 to 14 micrometer. The jet of ink will break into a continuous stream of droplets. By means of a piezo crystal the nozzle or the array existing of 8 nozzles is brought into vibration on a exact frequency of 625.000 Hz. This means that there are 625.000 droplets generated every second on each nozzle. Due to the fact of using electrical conducting ink, the droplets can be given an electrical charge. This is done by the charge electrode so that the droplets on their way through the high voltage field can divert on the way to the substrate. Non charged droplets are recycled.

The cloth is attached to a rotating drum, the printhead moving along this drum in horizontal direction. The inks are based on the 4 main colours yellow, cyan, magenta and black. They are completed with 4 extra colours blue, red, orange and gold-yellow. Inks are developed by Stork based on reactive dyes of Zeneca®. The use of reactive dystuffs requires pretreatment of the cloth. After printing the dystuffs have to be fixed to the cloth in a fixation unit. Then the cloth must be washed and ironed.

„hippoCAMPus“

*MEMORY, BEWUSSTSEIN, IDENTITÄT.
ZELLULARE AUTOMATEN, DATAGRAPHIE*-OBJEKTE.*

Im 16. Jahrhundert lebte ein Italiener namens Giulio Camillo, dessen Lebenswerk einem Modell galt, welches dem Menschen das Auswendiglernen, das Memorisieren erleichtern sollte. Dieses Modell hat er mit Hilfe visueller Symboliken als ein „Memory-Theater“ konstruiert, welches leider nie fertig geworden ist. Eine Schlüsselposition in diesem Modell gehört Prometheus, der das heilige Feuer stahl, den Menschen das Wissen der Götter, aller Künste und Wissenschaften lehrte.



Der Hippocampus befindet sich am inneren Rand des Schläfenlappens und spielt bei der Verarbeitung von Gedanken eine wesentliche Rolle. Er bewahrt und verarbeitet neu erlernte Informationen lediglich einige Wochen oder Monate und leitet sie dann in entsprechende Areale der Großhirnrinde zur Langzeitspeicherung weiter. Auf diese Speicher, so wird heute behauptet, hat dann das „Arbeitsgedächtnis“ der vorderen Gehirnrinde Zugriff. Obwohl stets neue Details erforscht werden, ist die Wissenschaft noch weit davon entfernt, das Memorisieren schlüssig erklären zu können.

Die Identität jedes Menschen basiert auf seiner Vergangenheit: Einerseits auf seinen Erinnerungen und vor allem darauf, wie er diese interpretiert. Andererseits involvieren Bewusstsein und Aktion ein subtiles Zusammenspiel zwischen Gedächtnis und Genetik. Die Interpretation von Erlebtem verändert sich im Laufe des Lebens. Insofern ist alles Vergangene nichts Fixiertes, sondern ein sich stets verändernder Prozess des Bewusstseins unter Einbeziehung der Gegenwart.

Während Programmier-Freaks im Bereich „Neuronale Netzwerke“ versuchen, Biosysteme des Gehirns für die „Künstliche Intelligenz“ nutzbar zu machen, erfreuen sich Neurologen an den neuesten Möglichkeiten computergestützter Gedankenmodelle. – Das Problem der künstlichen Intelligenz ist zu einem philosophischen geworden; das zeigen die Argumente der Befürworter und Gegner, die letztlich darauf hinauslaufen sich zu fragen, ob nicht der Mensch selbst ein Automat ist. Hat uns Prometheus etwas verschwiegen?

(Georg Mühleck, The Highlands, Scotland, August 1998)