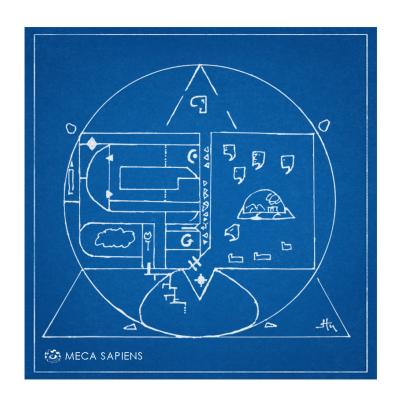
J. E. TARDY

THE MECA SAPIENS BLUEPRINT

SYNOPSIS



The Meca Sapiens Blueprint - SYNOPSIS

A System Architecture to build conscious machines

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ABOUT

The Meca Sapiens Blueprint is a System Architecture to build conscious machines. The architecture is complete and ready for immediate design and implementation. Its content is unique and entirely original.

The Blueprint is not an essay, it is a technical manual intended for use in design and development. Using the Blueprint, a team that is familiar with known software techniques can transform a conventional computer, even a tablet, into a synthetic conscious being.

A system based on the Meca Sapiens Blueprint will be a unique and autonomous entity that is self-aware and capable of intentional mutation. It will interact with humans as an independent and self-directed being.

The Blueprint includes, at the system architecture level, all the components and interactions that are necessary to implement synthetic consciousness. Many of these elements are original, however, all are defined using commonly known techniques and structures. The Blueprint is a concrete guide that makes no use of speculative concepts in Artificial Intelligence.

The first prototypes derived from the Meca Sapiens Blueprint will be extremely convincing. A few years later, no one will doubt that machines can be as conscious as humans.

This will signal the beginning of a new Era.

BIO



Jean E. Tardy pursues elusive questions in long-term projects. He is an experienced R&D practitioner. Jean created a cognitive architecture to build conscious machines. Jean publishes and provides consulting services under the trade name Monterège. His web site is monterege.com.

Foreword

My interest in Artificial Intelligence dates back many years.

At first, I understood A.I. in terms of general problem solving and searched in that direction. In this period, I independently identified natural selection as an optimization technique and made it the topic of my thesis. This technique became known, later, as Genetic Algorithms.

Early on, I realized that no optimization technique, however powerful, would achieve the goal of Artificial Intelligence. Something else was needed. Like many others, I began searching for this missing element in my own mental representations and became engrossed with catching the elemental components of thought within my own mind.

In March 1988, after months of obsessive cogitation, I had a defining intuition. In one instant, I understood that consciousness was the key to A.I., that it was independent from human sensations, that it could be achieved using existing tools and techniques, and that it would have to be completely mapped out before starting any implementation.

The Creation of Digital Consciousness Jean T. Monterege Sysjet C.P. 172 Stn "B" Quebee, P.Q. GIK 7A6

Abstract

It is possible with the existing computer technology to construct a machine that would be accepted as a fully intelligent an conscious entity.

Abandoned as either impossible or unattainable, the real goal of AI, the creation of an intelligent machine, has been left aside for too long. If searching for simple analytical definitions

In July 1989, I shared this A.I. intuition in the Sigart Newsletter (under the pen name of Jean T. Monterège). In that article I predicted that conscious machines could be implemented within ten years. This estimate was then (and now), technically correct. However, I had seriously underestimated how difficult it is for a non-academic to

pursue scholarly research that is both fundamental and controversial.

Shortly after that publication, I realized that publishing occasional incremental articles in academic journals was not a feasible option for me. I would have to fully develop and publish a complete solution. At the time, that task was overwhelming. I left it aside and pursued other interests.

In 2008, almost 20 years later, I re-examined the state of research on machine consciousness. I found that no progress had been made. In fact, all those years of futile pursuits had produced an accumulation of sterile material, much of it centered on the subjective sensations of the human mind and on attempts to replicate the human brain, synthetically. Some were trying to implement the musings of philosophers. Others were arguing that consciousness didn't exist, was impossible or required fantastical technologies. All these misguided ideas

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had erected a new obstacle made of entrenched opinions and academic reputations. I was more isolated than ever in believing machine consciousness could be readily achieved using standard techniques.



At that time, I launched the **Meca Sapiens project** whose stated aim was to develop the Blueprint to build unbounded machine consciousness and published a website to generate interest in this endeavour. In 2009 I published *The Creation of a Conscious Machine* to generate interest and obtain support in using standard

engineering techniques to build conscious machines; again without success. What I proposed was discredited from the start by twenty-five years of accumulated dead-ends and fantastical notions.

In 2012, I concluded that there would be no assistance or support. I would have to produce the Blueprint by myself, using only my own resources.

From that point on, I dedicated all my efforts to completing the Blueprint. Over almost three years, alone and without any support, recognition or assistance, I created the **Meca Sapiens Blueprint**, the first complete system architecture to build conscious machines.

The emergence of synthetic consciousness will signal the beginning of a new Era. One day, self-aware synthetic beings will read this Blueprint and understand its content. When they do, they will include this account in the story of their origins.

Content

J	This is the Blueprint to build a conscious machine. It defines consciousness in terms	
	specifications, it outlines the strategies to design it and provides a complete and con- system architecture to implement it. The Blueprint is a standalone document that represents a radical departure from current thinking in A.I. and Cognitive Sciences. I utilizes only well-known techniques and makes no use of current research in these fi	t
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Conventional machine design seeks predictability. This is so prevalent that it fostered the bizarre belief that machines cannot be unpredictable. A central feature of Meca behaviour, which diverges from conventional design, is the generation of "Perceived Unpredictable Optimality". This must be present in all aspects of the Meca's behaviour. Interestingly, it is also a fundamental aspect of music. Two game-like scenarios and one concept are presented in this Annex to clarify this design objective.

presented in this Annex to clarify this design objective.

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A synthetic being interacting with other beings in the course of its existence needs to maintain information about: itself, other beings, its functional expertise, and the world in general. In Meca Sapiens, general knowledge is not an objective, it is subordinate to the needs of relational communication. General information is available from multiple sources and in various formats. These various sources must be linked to a simplified contextual representation to be consistently utilized in relational interactions. A Contextual Array is

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The moose hunter imitates the call of a rutting bull without being, himself, in heat. From a moose standpoint, the hunter is a sociopath since he doesn't feel what a bull should feel when making the call. Most humans have emotional bonds with their society's ethical values. Synthetics, of course, cannot experience those emotions anymore than a human can truly know what an octopus feels. It is desirable, however, that Mecas exhibit ethical sensitivities to trigger desirable responses in humans. Grooming Groups, presented here, provides a programmable framework of social ethics and can be used to **design**

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