

5GT (=5th Generation Tool)

A tool to navigate through knowledge, classify it and retrieve it

An anachronism.

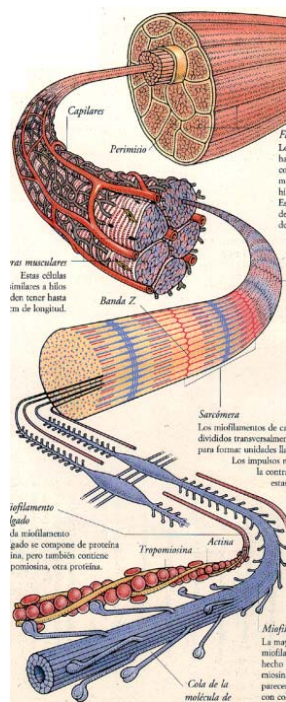
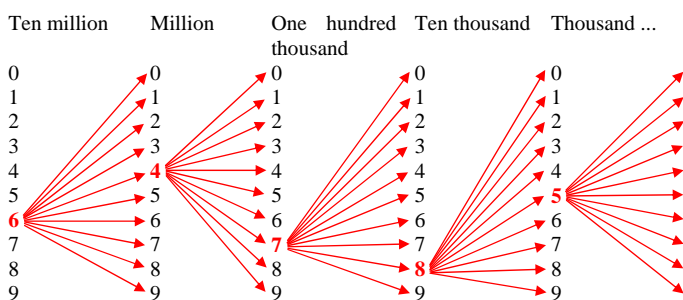
▪ The brain has no alphabetical or linguistic framework, nor words or pages, for that matter. All these are **extrinsic** resources which are conditioned by communicative, cultural and technological media.

▪ With the help of Software, RDBMS, Hypertexts, CD,...., and other tools, computer science could perform and simulate resources which are **intrinsic** to the psyche, but, due to the **lack** of a consistent and performable intrinsic **pattern**, it is still restricted to alphabetical ordering, words and pages.

▪ The expansion of the Science of knowledge **attests to this pending problem**. Thus, the efficient retrieval of concepts and knowledge, or of new expert knowledge (=Know-how) is still **unsolved**.

¿An exact and intrinsic conceptual system?

* in contrast, the number **64 785 213** is as manageable and familiar to us as any other, even though it is highly unlikely that we have come across it before.



* It took three millennia to develop decimal **positional notation**, and another millennium for it to settle. But, with its widespread use in just three hundred years, it has contributed to the development of mathematics and hence most technological advances and **our present civilization**.

* In the last 50 years, binary **positional notation** has enabled the development of computing.

* **¿Why?** Because these systems have **succeeded in reproducing** a set of symbolical, structural, semiological methods which are **already used by the psyche** to rule our body. Take a structure such as a **muscle** and/ or the method inherent in the **genetic code**.

The Challenge: an intrinsic/ universal “dictionary”.

* ¿Can this system of representation of concepts-number be **extend to all** concepts?

The answer is affirmative. There is an **exact complete “conceptual system”** of multiple heritage that represents all semantic knowledge. And among its concepts-elements we can find a set of **intrinsic relationships** with which we can represent all knowledge. We shall call this representation **“intrinsic/ universal dictionary”**.

Cognitive navigation.

* An element of knowledge is **always** a relationship between two concepts:

“aRb”

Be it very complex and/ or deep, the complexity will lie in **“a”** and/ or **“b”** and/ or **“R”**, henceforth allowing the progressive **decomposition** of any of its components into simpler concepts and relationships.

* Let us suppose that:

- we represent the conceptual and cognitive processes **step by step**, in the same way as a child or an adult, **regardless of their language and culture**, would build them up.

- we have created the indexes to this “intrinsic/ universal dictionary” as regards different languages, and we refer to it, word by word, or idea by idea, or sentence by sentence.

* Then:

- we could **navigate** irrespective of language, denomination, or any prior knowledge needed.

- we could store all our knowledge **retrievably**, for ourselves in the future or for anybody else. And, if interested, we could have **access** wherever anybody else had already been to (=self-education), even if we did not know their name or where they are (=prediction of concepts).

CCUCCCCACCGCCUCCCCACCGAAAAAGAAAAAGAAAAAGAGAAGCAAAAAGGUUGUCGUAGUG
CCU CCC CCA CCG CCU CCC CCA CCG AAA AAG AAA AAG AAA AAG AGA AGC AAA AAG GUU GUC GUA GUG
Prolina Prolina Lisina Lisina Lisina Arginina Lisina Valina
Antígeno T de SV40

**The “Magic formula”:
an intuitive and cognitive MetaData**

5GT (=5th Generation Tool)

* An “intrinsic/ universal dictionary” is like a **MetaData** in a “**Datawarehouse**” which includes all knowledge in its huge, heterogeneous immensity. Its “**Drill-down**” helps us **incorporate** any new element of knowledge, since it descomposes it down to its simplest components. Conversely, it enables us to **find** any incomplete notion in a element of knowledge.

* **Intuition** thus becomes a tool of “**Interdimensional navigation**”.

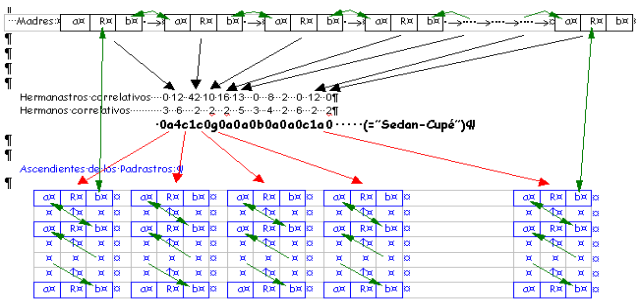
* ¿What is the Knowledge MetaData? It is the set of **semiological** and **semantical methodologies** for the **genesis** of concepts and their relationships, and for the **composition**, prior to languages and nouns.

Sedan-Coupé (=Saloon-Coupé)

* For example, this concept could take:

.0a4c1c0g0a0a0b0a0a0c1a0

as **code/ pseudométric**, including around 1 000 **implicit** simples pieces of semantical elements of knowledge, of **direct intuitive acces**.



Their **relationships other than semantic**, could be even **more numerous**: technical, commercial, legislative, ...

Classification applications.

- * An element of knowledge, or a newspaper article, or a complex item of knowledge, ..., is:
 - one or several elements of semantical knowledge,
 - one or several elements of phenomenological knowledge.

=ΣaRb

Software Engineering.

- * The code of a program is a set of elements of knowledge/ functionalities, that could be represented with this “dictionary”, and be **retrieved** so as **never to repeat** them.
- * Likewise, in the case of an Applications program, with its **many solutions** to the **most common specific problems** in installing, implanting, operating, ... (=Knowledge).

Applications program applications.

- * When a user wants to **learn** how Applications program works, that is, **how this program operates**, their help takes the form of small Thesaurus/ unfolding Menus, which are liable to **change** from one version to another. These Thesaurus are **not** made up of knowledge, but of concept trees, which are enumerative and arbitrary in turn. They are neither comprehensive nor intrinsic.
- * A “universal/ intrinsic Dictionary” enables us to **question** the helps in Applications program, with **elements of knowledge**, and in our **mother tongue**.

©Carles UDINA i COBO (SISTEMES COMPLEXOS SL)
www.sistemaconceptual.org; www.holistictheory.org
 Sant Josep, 67; 08340 Vilassar de Mar (Barcelona; Catalunya; España)
 ☎ 34+937 595 035 (+Fax), 660 298 994;

