

The Alphabet Effect (Wm Morrow
1986; 2nd edit. Hampton 2004)

- The Alphabet & Phonetic Writing
- Codified Law •Monotheism
- Abstract Science •Deductive Logic

An autocatalytic set of ideas that
emerged between 2000 and 500 BC in
Mesopotamia, Israel, and Greece

The alphabet teaches the lesson of
analysis, coding, decoding and
classification. The alphabet is both a
communication medium and an
informatic tool.

The alphabet, monotheism, law,
science, logic are media that
interacted with each other and
co-evolved

The Sixth Language (Stoddart 2000,
2nd edit. Blackburn 2004)

Language = communications +
informatics

Speech, writing, math, science,
computing and the Internet form an
evolutionary chain of six languages

Each language has a unique semantics
and syntax

Each new language emerged in a
response to the chaos of the
information overload that the previous
languages could not handle

Writing and mathematics emerged simultaneously in Sumer circa 3000 BCE

They emerged from accounting tokens used to track commercial transactions and respond to an information overload.

Schools were organized to teach the skills of reading, writing and arithmetic and gave rise to teachers, scholarship and another info overload

Science dealt with this info overload and gave rise to a new one resolved with computing.

Computing gave rise to another info overload which the Internet resolved

Collaborate to Compete: Driving Profitability in the Knowledge Economy

Robert K. Logan and Louis W. Stokes
Wiley (Toronto and New York) 2004

We operate in the knowledge economy but not enough attention has been paid to the management of an organization's knowledge assets. This has given rise to knowledge management, which we define as:

Knowledge management is the organizational activity of creating the environment, both attitudinally and technologically, so that knowledge can be accessed, shared and created within an organization in a way that all of the experiences and knowledge within the enterprise can be organized to achieve the enterprise's objectives and reinforce its values.

Unfortunately KM has failed to deliver on its promise.

Why hasn't knowledge management (KM) been more successful?

In *Collaborate to Compete* Logan and Stokes suggest that not enough attention has been paid to the human side of knowledge management.

They suggest that collaboration is the missing link and not enough attention has been paid to this vital element.

They identify the problem in the following terms:

The more complex and sophisticated the technology, the more important are the human behavioral issues of attitude, cooperation and motivation, as well as the training, education and learning of all members of the organization.

The "soft" issues are the "hard" problems.

To be competitive an organization must strive to become a collaborative organization. There must be trust, shared knowledge, aligned goals, decentralized decision making and minimal hierarchical structures.

The Five Messages of the Internet

The Internet is both a model or metaphor for collaboration as well as a medium for the actual implementation of collaboration.

Using McLuhan's notion that "the medium is the message" we showed in the Sixth Language that the Internet has a unique set of five properties, characteristics or messages that, taken together, make it the ideal medium for collaboration and knowledge networking. They are:

- the two-way flow of information
- the ease and speed of access of information
- continuous learning
- alignment and integration of common objectives
- the creation of community

Understanding New Media: Extending Marshall McLuhan

The objective is to develop an understanding of digital "new media" and their impact using the ideas and methodology of Marshall McLuhan. We want to understand how the "new media" are changing our world, which includes how the "new media" are impacting the traditional or older media that McLuhan (1964) studied in *Understanding Media: Extensions of Man*.

I have identified the 14 characteristics of "new media" which explains their success and rapid adoption.

1. two-way communication
2. ease of access to and dissemination of information
3. continuous learning
4. alignment and integration, and
5. community.

These five messages of the Internet are also characteristics shared by all of the "new media." Since formulating these five messages of the Internet my study of the "new media" revealed that there are also nine other additional properties or messages that characterizes most "new media". They are

6. portability and time flexibility (time shifting), which provide their users with freedom over space and time;

7. convergence of many different media so that they can carry out more than one function at a time and combine as is the case with the camera cell phone that operates as phone but can also take photos and transmit them;

8. interoperability

9. aggregation of content;

10. variety and choice to a much greater extent than the mass media that preceded them;

11. the closing of the gap between (or the convergence of) producers and consumers of media;

12. social collectivity and cooperation;

13. remix culture; and

14. the transition from products to services.

The Extended Mind: The Origin of
Language, the Human Mind and Culture
(U. of Toronto Press 2007)

What can the evolution of notated language
teach us about the origin of speech and
culture?

Complexity and the emergence of language
& culture

Mind = language + brain & neo-dualism

Universal grammar and universal culture
The propagation of organization and the
origin of life, humans, language, culture,
technology, governance and economy

Speech emerged as the bifurcation from percepts to concepts and a response to the chaos associated with the information overload that resulted from the increased complexity in hominid life, which included

- Tool making and use;
- Control of fire;
- Social cooperation to maintain the hearth;
- Food sharing,
- Group foraging & hunting;
- Mimetic communication (gesture, hand signals, body language and vocalization)

As complexity increased the percept-based brain couldn't cope — it needed concepts for abstract thought

Speech represented a bifurcation from
percepts to concepts

Our first words were our first
concepts

They acted as strange attractors for
the percepts associated with those
words

The word water unites our percepts of
the water we drink, cook with, wash
with, rain, melted snow, lakes, rivers

Thought is as much silent speech as speech
is vocalized thought.

Merlin Donald claims that mimetic communication was the cognitive lab in which verbal language developed and that it was intentional & representational

If it was such a good communication system why was there a need for verbal language?

It was useful for: 1. conceptualization, 2. symbolic, abstract thought and 3. planning.

By allowing for thought about objects and actions not in the immediate perceptual field language permits planning

Mind = Brain + Language

Before language the brain was basically a percept processor

With language the brain becomes capable of conceptualization and hence bifurcates into the human mind

The emergence of verbal language represents three simultaneous bifurcations:

1. the bifurcation from percepts to concepts,
2. the bifurcation from brain to mind,
3. the bifurcation from archaic Homo sapiens to full fledged human beings
(Logan 2003b, pp. 75-76)

My previous work with the origin and evolution of language and the propagation of organization plus a paper by Hofkirchner has led me to speculate on the existence of seven levels of biosemiosis. First Wolfgang's quote that inspired this probe:

“Semiosis and self-organization are co-extensional – there are as many different basic types of semiotic processes as there are basic types of systemic self-organizing processes.”

The seven levels of biosemiosis are as follows:

1. the digital transmission of information by DNA from one generation to another;

2. epigenesis of the phenotype from the DNA influenced by signals from the environment;
3. the process by which receptors of prokaryotes interpret signals from the environment;
4. the biosemiosis of learning by virtue of the emergence of a central nervous system in animals;
5. the transition from percept-based thought to concept-based symbolic thought that emerged contemporaneously with human speech;
6. the sociosemiosis of human society or culture, a symbolic based phenomenon; and

7. the semiotics of human signs both oral and notated.