

## **INDEX – General Neurolinguistics Conceptual Thinking - Early Mastery of the Reading Skill (Objective Correlation Mechanics)**

André Michaud

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*General Neurolinguistics* is meant to correspond to the major revision of *General Semantics* that Alfred Korzybski mentioned on numerous occasions as most likely to occur within 25 years of his passing away (1950), and that naturally emerges from it when the mental barrier due to the unwarranted certainty that physical reality cannot be confirmed with certainty and cannot be objectively understood is removed. Interestingly, the analysis leading to this particular revision began to be carried out in the 1970's, that is, within the time frame that Korzybski expected, even though it could be fully documented and related to the complete set of required formal references only much later, due to the time that was required to identify, locate and correlate every major element of the solution that led to the present synthesis. Summary description of General Neurolinguistics followed by summary description of General Semantics that it is meant to enhance. Summary analysis of the influence of the motivation in individuals, driven by their feelings of insecurity and the extent of their personal general knowledge bases in the establishment of social structures throughout history. Summary analysis of the causes of the historical resistance of the academic community to the introduction of new grounding paradigms that could have been beneficial to society. Identification of the relation between the extent of the general knowledge base of individuals and the extent of their resulting level of social awareness. Summary overview of the comprehension process and of the properties of the neocortex, whose coordinated use favors the acquisition of objective knowledge.

- [Study on General Neurolinguistics and the Comprehension Ability](#)

Michaud, A. (2021). *Study on General Neurolinguistics and the Comprehension Ability*. In: Dr. Darko Nozic, Editor. Pages 35–60.  
<https://doi.org/10.9734/bpi/nfmmr/v11/1876C>

- [Étude sur la Neurolinguistique Générale et la capacité de compréhension](#)

- [Estudio sobre la Neurolingüística General y la capacidad de comprensión](#)

- [Studie zur Allgemeine Neurolinguistik und zur Verstehensfähigkeit](#)

Summarily description of how the discoveries made by Donald Hebb about the manner in which the neocortex multilayer neural networks processes and stores information can explain the relation between our sensory perceptions and the words of articulated languages that we use to describe them. Summary description of how the discoveries made by Paul Chauchard of the relation between level of intelligence and density of the synaptic network of interconnections established during infancy in the verbal areas of the neocortex harmonize with Hebb's discoveries. Summary description of how the automatic correlation mechanics of the neocortex neural network allows the generalization ability discovered by Ivan Pavlov as being due to the use of articulated languages, and how it also explains why

the reasoning method defined by Alfred Korzybski is so effective in helping to establish a clearer understanding of our environment, with a summary description of the reasoning mode by successive perceptions of coherences that Korzybski established.

- **Michaud, A. (2021) *Relating the Comprehension Ability to the Neocortex Verbal Areas: A brief study*. In: Dr. Slawomir Borek, Editor. *New Visions in Biological Science Vol. 1*. 10 August 2021, Pages 136-164**

- **Relation entre la capacité de compréhension et les zones verbales du néocortex: Une brève étude**
- **Relación entre la capacidad de comprensión y las áreas verbales del neocórtex: Un breve estudio**
- **Zusammenhang zwischen der Verstehensfähigkeit und den verbalen Arealen des Neokortex: Eine kurze Studie**

Description of the mechanics of conceptual thinking that stems from interaction sequences between the limbic system and the verbal areas of the neocortex. Description of the rise of the attention level to full active awareness when a feeling of uneasiness due to a verbal stimulus is triggered by the amygdala, followed by an active cogitation process involving the verbal areas of the neocortex, ending in the strengthening in the neocortex by the hippocampus of a synaptic network corresponding to a modified verbal sequence that re-moves or reduces the feeling of uneasiness that initiated the sequence. Description of the generalization ability that emerges from the use of articulated languages, acquired by education, from which conceptual thinking, and also the collectively intelligible mathematical language emerge, that also develops to various degrees in some individuals by education. Description of the mathematical thinking mode, whose engrams have been located in the neocortex in areas that do not overlap the verbal areas.

- **Michaud, A. (2019) *The Mechanics of Conceptual Thinking*. *Creative Education*, 10, 353-406. <https://doi.org/10.4236/ce.2019.102028>**
  - **La mécanique de la pensée conceptuelle**
  - **La mecánica del pensamiento conceptual**
  - **Die Mechanik des konzeptuellen Denkens**

This article reviewed and expanded was republished with a new title as a chapter in book titled "[\*New Horizons in Education and Social Studies Vol. 6\*](#)", which is part of a collection that pre-selects articles deemed worthy of attention from the global offering, to be put at the disposal of the community.

- **Advancement on the Mechanics of Conceptual Thinking**

Michaud, A. (2020) *Advancement on the Mechanics of Conceptual Thinking*. In: Dr. Sachin Kumar Jain & Dr. Alina Georgeta Mag, Editors. *New Horizons in Education and Social Studies Vol. 6*, Chapter 4. West Bengal, India: Book Publisher International. 2020. <https://doi.org/10.9734/bpi/nhess/v6>.

(PROMOTIONAL VIDEO)

- **Progrès dans le domaine de la mécanique de la pensée conceptuelle**

- **Avances en el campo de la mecánica del pensamiento conceptual**
- **Fortschritte im Bereich der Mechanik des konzeptionellen Denkens**

General description of the human neocortex verbal areas and exploration of the manner in which the synaptic neurolinguistic structure that develops in these areas after birth establishes our comprehension ability. Description of the manner in which the neurolinguistic subjective model of reality that develops in these areas can be made to evolve towards objective representation.

- **Michaud A (2017) On the Relation between the Comprehension Ability and the Neocortex Verbal Areas. J Biom Biostat 8: 331. doi:10.4172/2155-6180.1000331**
- **Sur la relation entre la capacité de compréhension et les zones verbales du néocortex**
- **Sobre la relación entre la capacidad de comprensión y las áreas verbales del neocórtex**
- **Beziehung zwischen der Verständnisfähigkeit und den verbalen Neocortex-Bereichen**

Summary overview of intelligence development in young children, coinciding with neocortex verbal areas development by means of mastery of the reading skill and of the state of children literacy development in the world.

- **Michaud A (2016) *Intelligence and Early Mastery of the Reading Skill*. J Biom Biostat 7: 327. doi: 10.4172/2155-6180.10003**
- **Intelligence et apprentissage précoce de la lecture**
- **Inteligencia y aprendizaje temprano de la lectura**
- **Intelligenz und frühe Beherrschung der Lesefähigkeit**

Here is a brief overview of the main features of the comprehension process, stemming from the research of Pavlov, Chauchard and Korzybski. (Introductory text used at the formal launching of the book [**Einstein's Operating System**] at MENSA-Québec on May 31, 1997)

- **Michaud A (2016) *Comprehension Process Overview*. J Biom Biostat 7: 317. doi:10.4172/2155-6180.1000317**
- **Bref Survol du Processus de Compréhension**
- **Sobrevuelo breve del Proceso de Comprensión**
- **Kurzer Überblick des Verständnisprozesses**

Analysis of a field research report shedding a disquieting light on the reasons that were identified for diagnosing a constantly increasing number of children as suffering from ADD/ADHD and subsequent prescription of Ritalin and other psychostimulants. This study attempted to identify, without success, whether learning problems observed in some children could be due to some brain pathology.

The present analysis abstracts the main conclusions of an exhaustive field study carried out by a French-Canadian research team regarding out of control ADD and

ADHD diagnosing and psychostimulants prescription to elementary school children in the city of Laval, that falls under the jurisdiction of the Ministère de l'éducation of the French-Canadian community in the Province of Quebec, and that seems to be a reflection of the diagnosing and prescription trend in North America.

- **Michaud A (2016) *Critical Analysis of a Field Research Report on ADD and ADHD*. Int J Swarm Intel Evol Comput 5: 142. doi: 10.4172/2090-4908.1000142**

- **Analyse critique d'un rapport d'enquête de terrain sur les diagnostics de TDAH**

- **Análisis crítica de un trabajo de investigación en terreno sobre los diagnósticos de TDAH**

- **Kritische Analyse eines Feldforschungsberichts zu ADS/ADHS**

This article, revised and amplified to correlate this Cohen et al. study with a sociological study that was carried out independently and published the same year (1999) on the state of mother tongue teaching in the Province of Québec, was republished upon invitation as a chapter in the book titled "[\*Current Approaches in Science and Technology Research Vol. 2\*](#)", which is part of a collection that pre-selects articles deemed worthy of attention in the overall offering, to make them more immediately available to the community.

- **Michaud, A. (2021) *Field Research Report on ADD and ADHD: A Critical Analysis*. [\*Current Approaches in Science and Technology Research Vol. 2\*](#), 93–102. <https://doi.org/10.9734/bpi/castr/v2/8835D>**

- **Rapport d'enquête de terrain sur les diagnostics de TDAH: Analyse critique (Republication amplifiée PI)**

- **Trabajo de investigación en terreno sobre los diagnósticos de TDAH: Análisis crítica (Republicación extendida PI)**

- **Feldforschungsbericht zu ADS / ADHS: Kritische Analyse (Erweiterte Wiederveröffentlichung PI)**

In summary, this sociological study,

- **Élite en Faillite**

- **Our Bankrupt Elite**

reveals that the Quebec Ministry of Education, which was created in the 1960s, led by an anonymous elite with apparently little knowledge of sound educational practices, improvised itself as specialists in education, and caused the requirement of teaching the mother tongue up to minimal autonomy in reading that was previously mandated at the end of the first year of primary school to be abandoned, and arbitrarily spread the acquisition of this level of mastery over the first three years of primary school, despite the fact that it was already scientifically established that reaching this minimal level of reading autonomy becomes much more difficult past the age of 7, due to an irreversible physiological maturation process (myélinisation of the verbal areas of the brain) that occurs for all children at about this age of 7, which renders all the more difficult the subsequent improvement of all verbal skills for which this threshold of minimal fluency was not reached before this deadline.

The outcome of their decision was a steady increase in the functional illiteracy rate in the adult population of the province of Quebec that reached the barely believable level of 53% of the population in 2013, according to OECD figures. Concurrently, a steady increase was observed in the prescription of psychostimulant drugs to control behaviors that were already known, in truly informed circles, to occur in children who do not achieve sufficient mastery of their language in a timely manner, without any indication that radical measures are being implemented, or are even being considered, to reverse these deterioration rates.

Apparently completely unaware of the comprehension difficulties that insufficient mastery of all language skills in a timely manner causes in children, but perceiving that fewer and fewer students were succeeding in their schooling, these anonymous pedagogues found no better way to restore success rates than to progressively reduce the level of difficulty of the passing exams, and even, which is the ultimate height of absurdity, for the very level of language mastery, and to reduce the content of the general knowledge courses deemed too difficult at the secondary level.

The result over time was that the following generations of teachers, emerging from this failing system, even less informed and not sufficiently proficient in their own mother tongue to teach it properly, began to train the following generations of children. This is what attracted the attention of the present author in the 1990's, when we received a short note from our daughter's teacher full of spelling errors.

Running out of options to increase the success rate, given their limited knowledge in pedagogy, these anonymous pedagogues found nothing better to address the issue than to finally eliminate other topics considered too difficult from the secondary school curriculum, such as classical literature and the history of our people, two of the pillars of our French Canadian culture, causing it to wither away over time to the point where the last generations of our people are barely aware of their own history and culture.

These anonymous pedagogues were eventually replaced by other anonymous newcomers educated in the flawed system that their predecessors had put in place, from which generation after generation of a new elite emerged with insufficient general knowledge for them to develop social awareness and sufficient competence for rational management of public affairs. This also explains why, by the end of the 1990s already, no one in this ignorant elite, now in control of all levers, was any longer able to understand and react to the alarm signals given by the Cohen et al. survey report and by the sociological study carried out in parallel, when they were published in 1999.

The height of irresponsibility is now being reached, 20 years after the publication of the Cohen et al. survey report and of the parallel sociological study, that is, 60 years after the improvised reform of our education system, our Minister of Higher Education is now preparing to ban the teaching of the history of Western civilization, the last remaining pillar of our culture.

Historically, our elite is not the first to commit such a cultural suicide. The Romans already showed us the way by forbidding the teaching of the sciences inherited from the Greeks, reminding us of this statement by George Santayana in *The Life of Reason*, Vol. 1, 1905: "*Those who cannot remember the past are condemned to repeat it*".

The quality of education subsequently deteriorated to such an extent in the Roman Empire that no one was eventually becoming sufficiently educated to enable rational

management of public affairs. The Empire then gradually fell apart under the indifferent gaze of those who glorified themselves for being part of the Empire's "elite".

Sixty years after the reform of the 1960's, it can be observed that after the enthusiasm of the first years, aroused by the expected but never realized benefits of this improvised reform, the entire political and intellectual elite of the province of Quebec, with the indifferent collaboration of the teachers' unions, quickly became completely indifferent to the quality of education of its own upcoming replacements elite, with the results that can now be observed.

What is happening in Quebec in the domain of education should be a warning to all societies tempted to neglect adequate teaching of the mother tongue to minimal autonomy in due time, that is, at the latest in the first year of primary schooling and to favor early specialization instead of teaching a broad general knowledge base at the secondary school level.

**Other articles by the same author:**

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