

**\*\* The Status of Language in Human Cognition and Communication \*\***

<http://inyaz.herzen.spb.ru/symposium.html>

**“ Proposal for a shared evolutionary nature of language and consciousness “**

Christophe Menant <http://crmenant.free.fr/Home-Page/index.HTM>

- Bordeaux – France -

**A) Evolutionary scenario for self-consciousness and language.**

**A.1:** Identification with conspecifics and evolution towards self-consciousness.

**A.2:** Identification with conspecifics and anxiety Increase.

**A.3:** Anxiety limitation and language. Evolutionary advantages.

**A.4:** Action scenario improvements. Evolutionary advantages.

**A.5:** Evolution of consciousness and language. Overall scenario.

**B) Organic meaning generation and its evolution towards language.**

**B.1:** Organic meaning generation. Stay alive constraint.

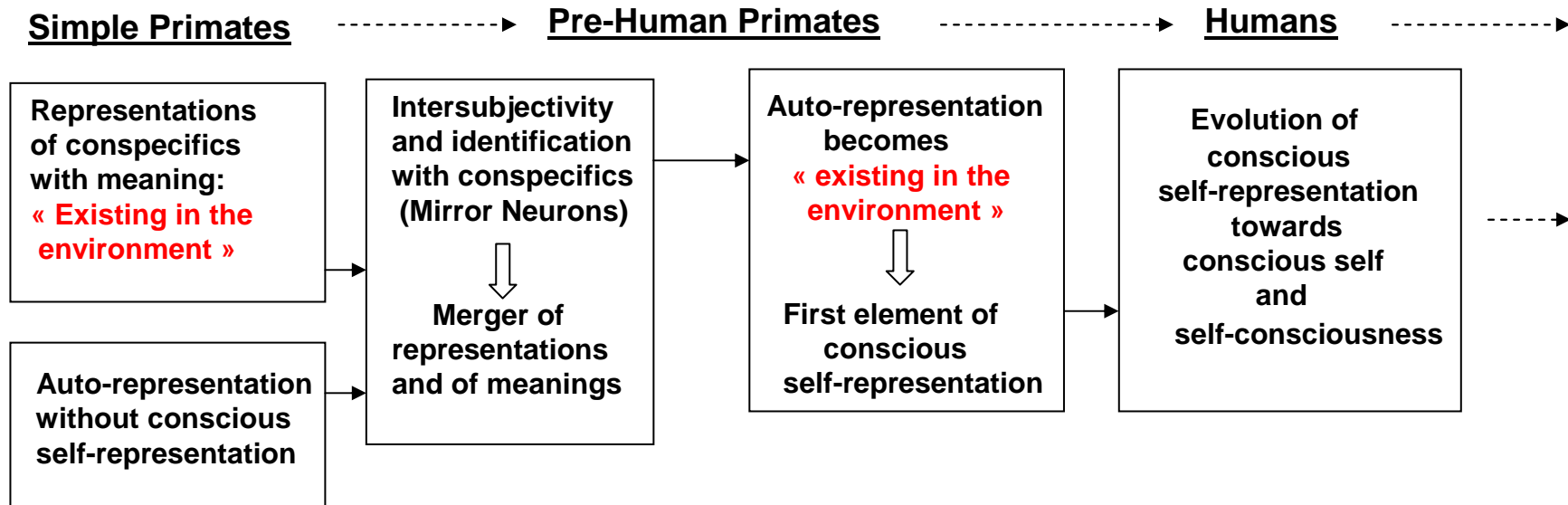
**B.2:** Meaning communication. Group life constraints.

**B.3:** Meaning communication. Group life constraints. MGS.

**B.4:** Evolution of meaning communication towards language.

**C) Conclusion. Continuations. References**

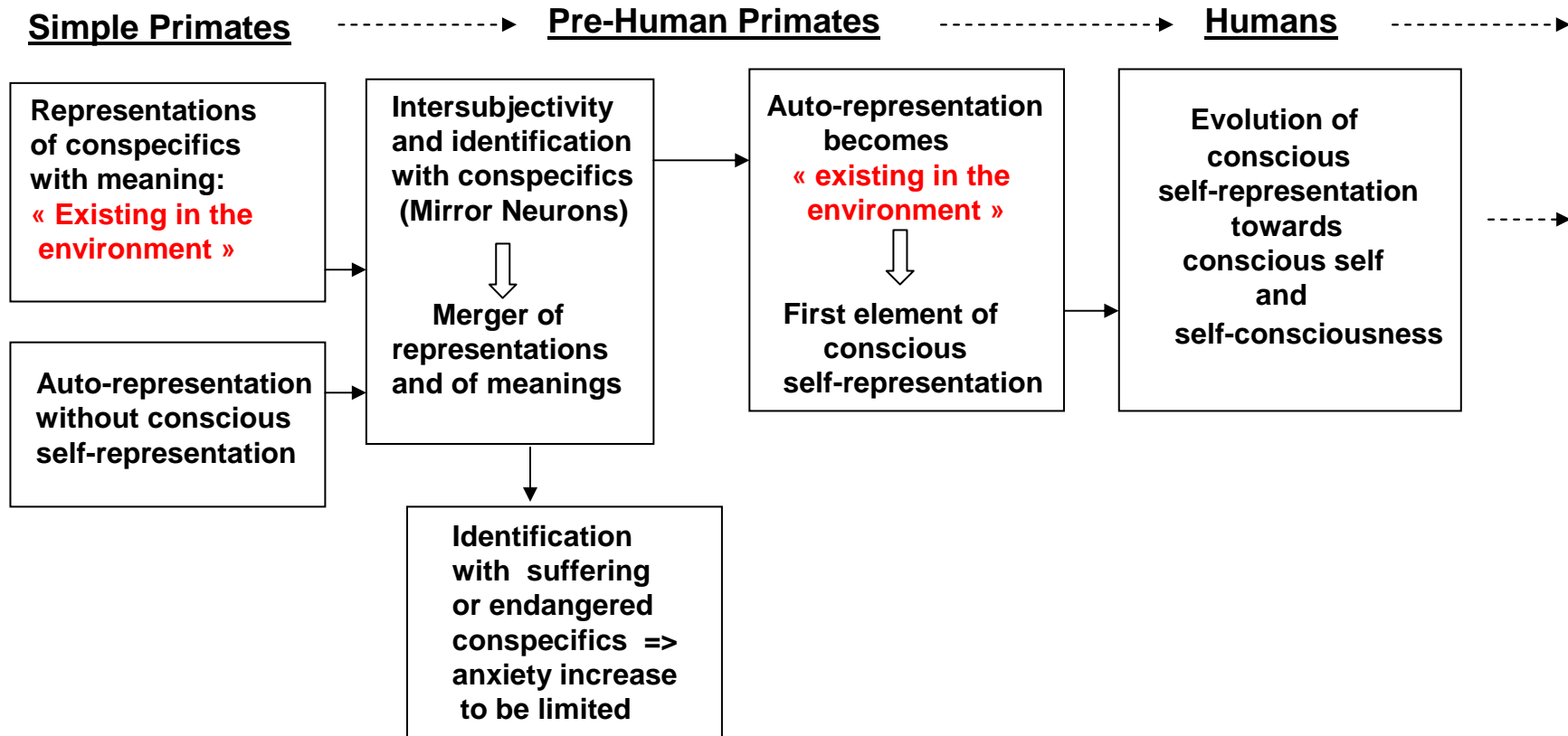
### A) Evolutionary scenario for self-consciousness and language



- \* Pre-human primates lived in groups.
- \* Conspecifics were represented as existing in the environment.
- \* Pre-human primates carried some auto-representation.
- \* Pre-human primates identified with conspecifics.
- \* The auto-representation became « existing in the environment ».
- \* Initiated first elements of conscious self-representation.

#### A.1: Identification with conspecifics and evolution towards self-consciousness [4]

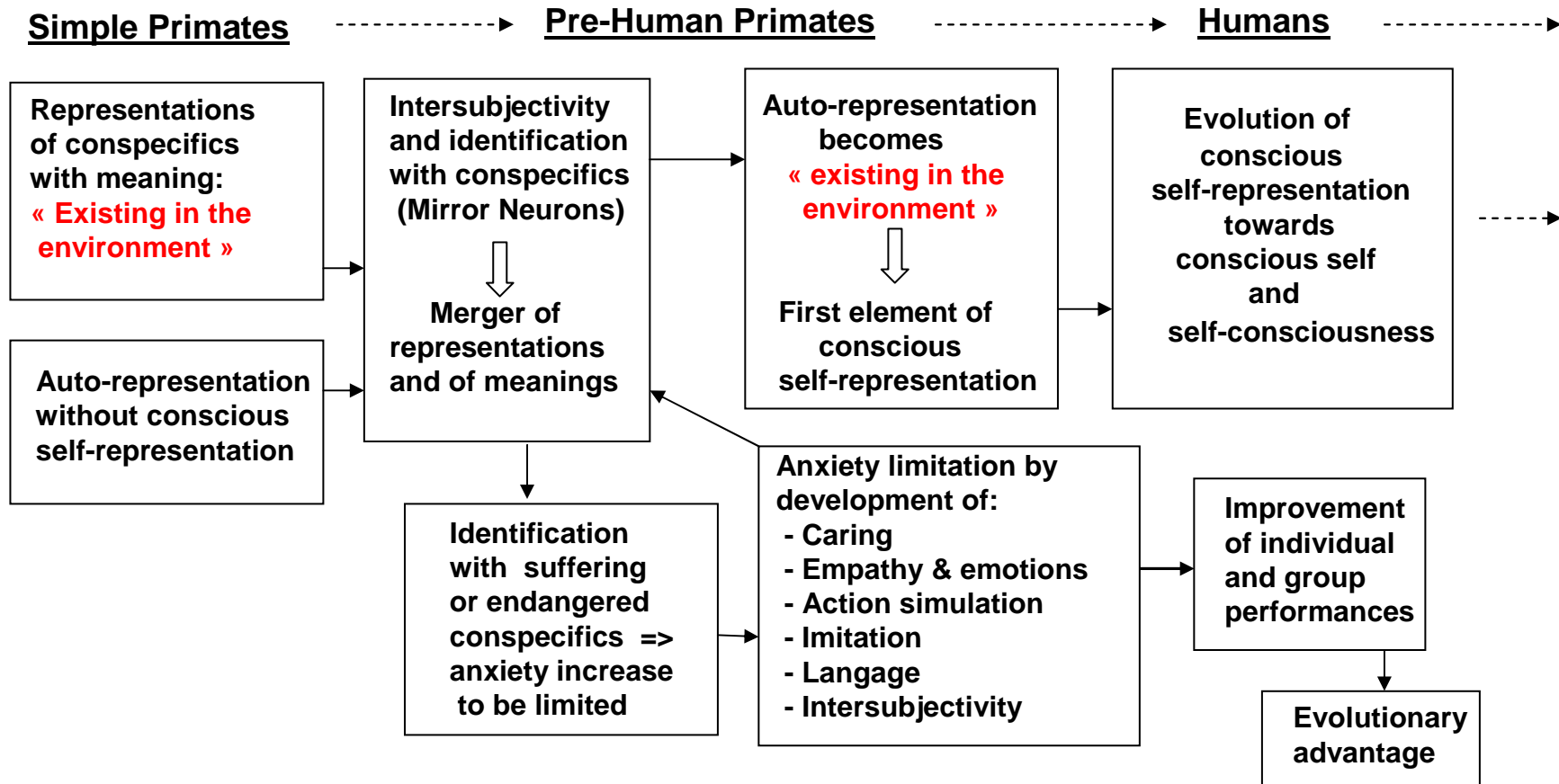
### A) Evolutionary scenario for self-consciousness and language



- \* Dangerous environment at times of survival of the fittest.
- \* Identifying with suffering or endangered conspecifics created an anxiety increase.
- \* Important anxiety had to be limited.

A.2: Identification with conspecifics and anxiety increase [4]

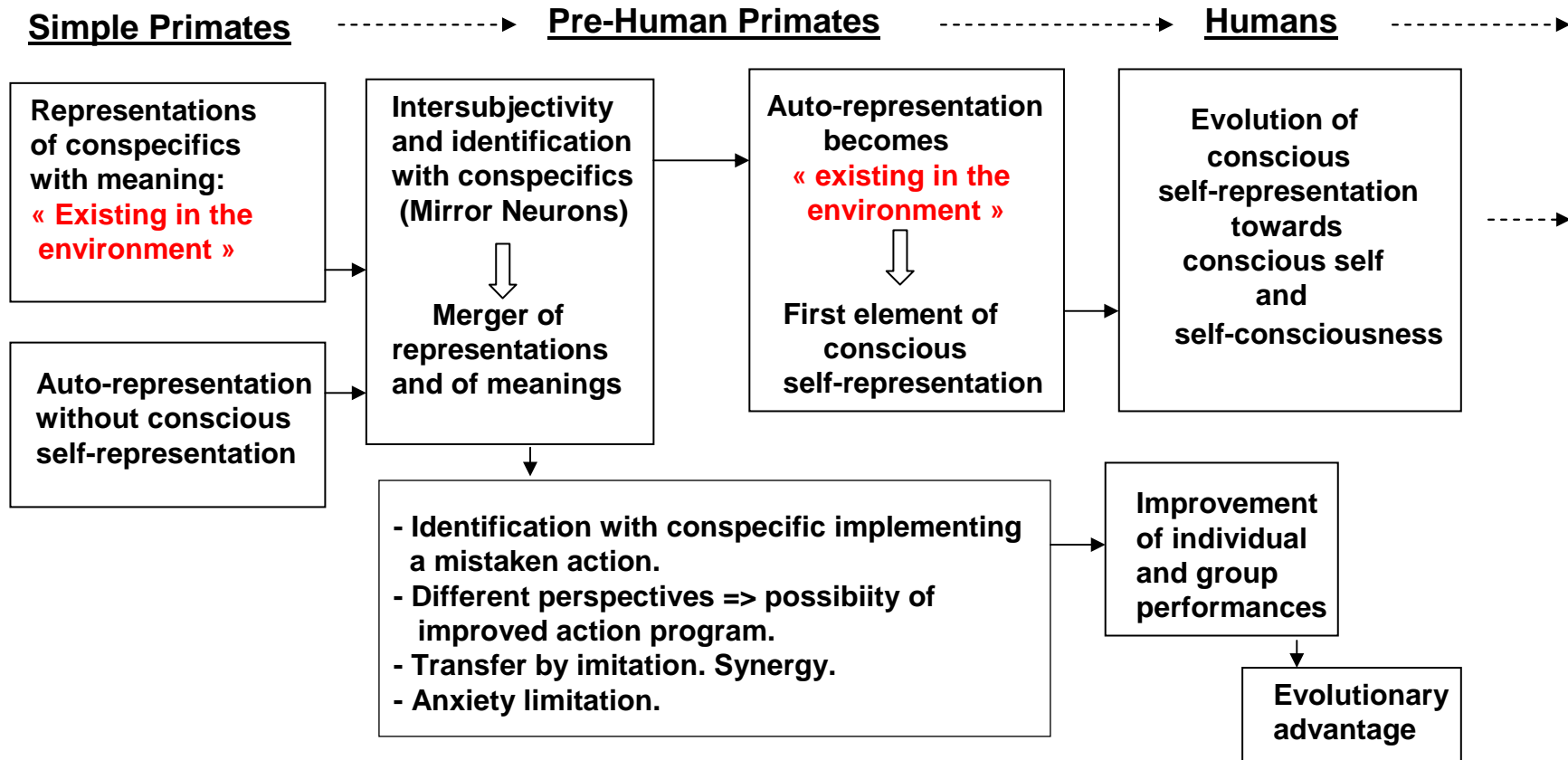
**A) Evolutionary scenario for self-consciousness and language**



- \* Anxiety limitation by development of behavioral & mental capacities, Includes language.
- \* Evolutionary advantage and positive feedback on intersubjectivity.
- \* Development of language as key in the evolutionary scenario of self-consciousness.
- \* Evolution from communication to language to be analyzed within evolution of SC.

**A.3: Anxiety limitation and language. Evolutionary advantages. [4]**

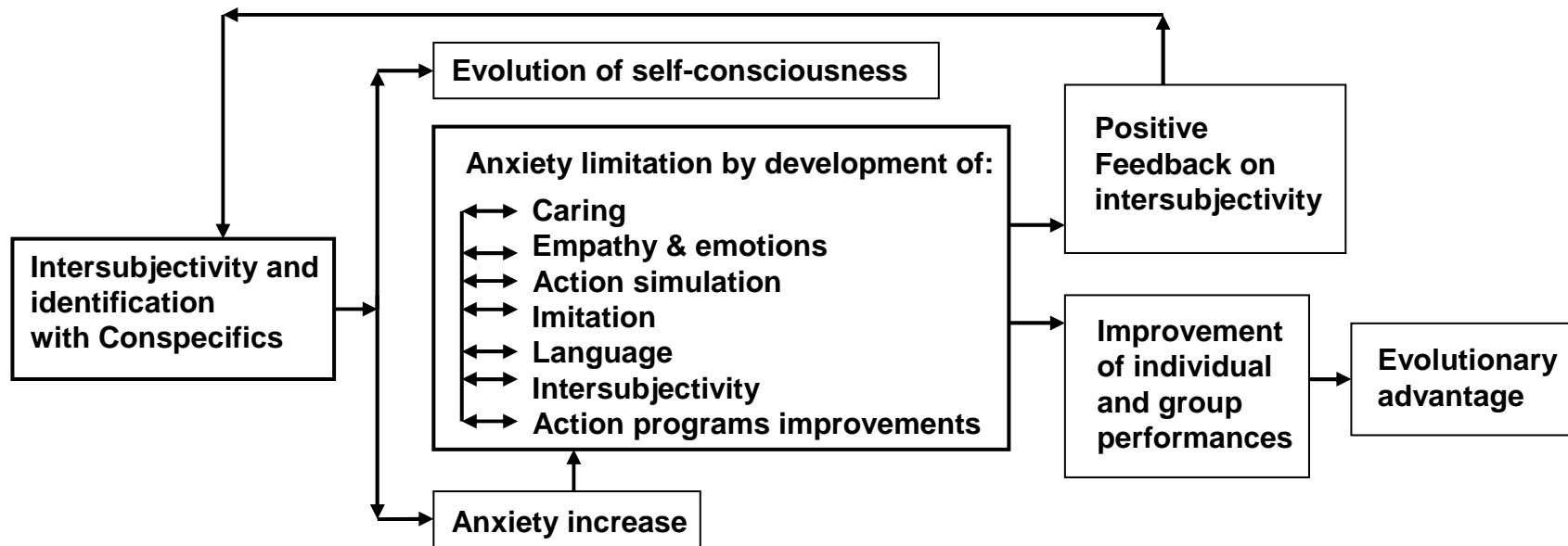
**A) Evolutionary scenario for self-consciousness and language**



- \* Agent feels as her own the mistaken action implemented by the conspecific.
- \* Agent perceives the mistaken action from her position.
- \* Different perspective => possibility of new action programs that avoid the mistake.
- \* Improved action programs availability. Transfer to conspecifics by imitation and language.

**A.4: Action scenario improvements. Evolutionary advantages. [7]**

### A) Evolutionary scenario for self-consciousness and language



- \* Positive feedback and evolutionary advantages for self-consciousness.
- \* Contributors are interrelated. Language is key contributor (synergy).
- \* Nature of language is embedded in nature of consciousness.
- \* Anxiety increase/limitation as permanent evolutionary engine.

A.5: Evolution of consciousness and language. Overall scenario.

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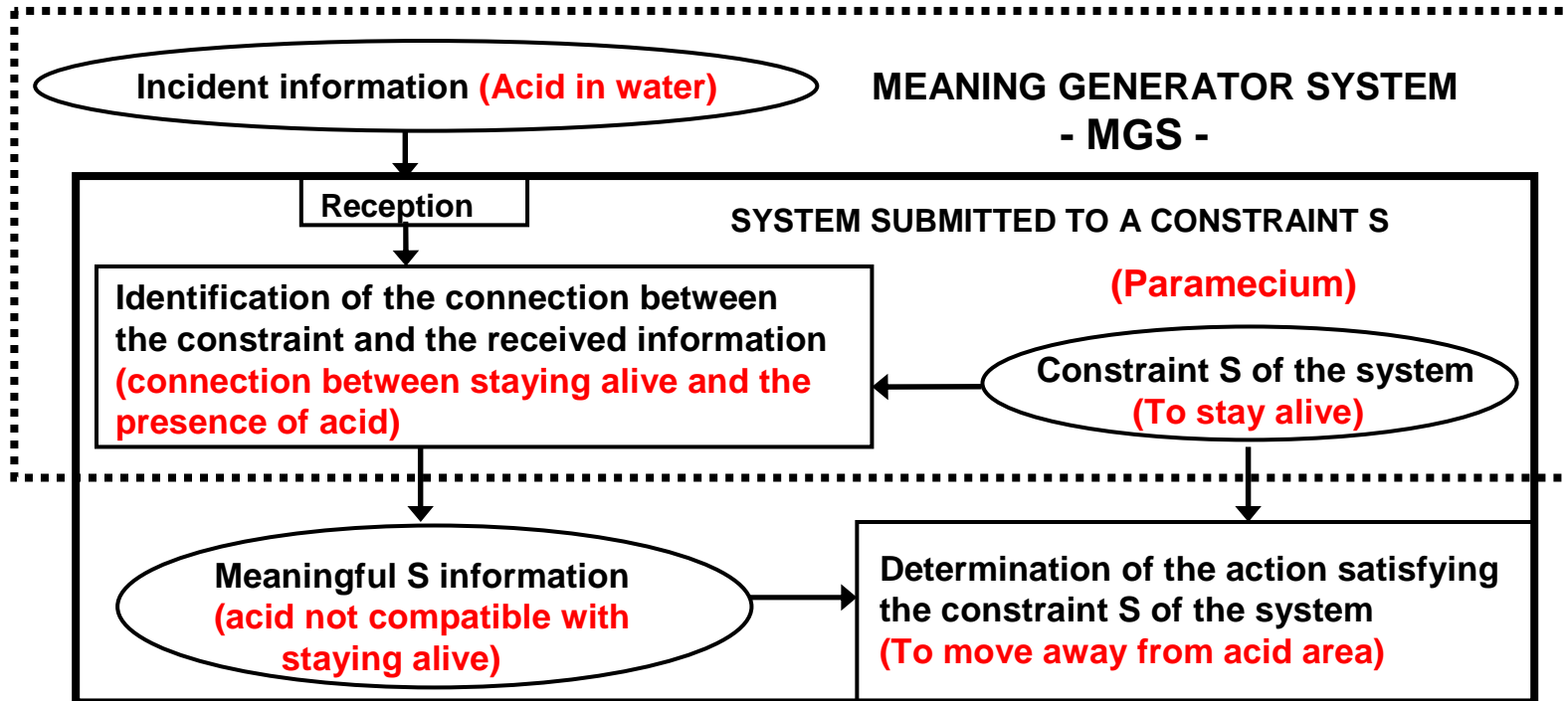
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## B) Organic meaning generation and its evolution towards language

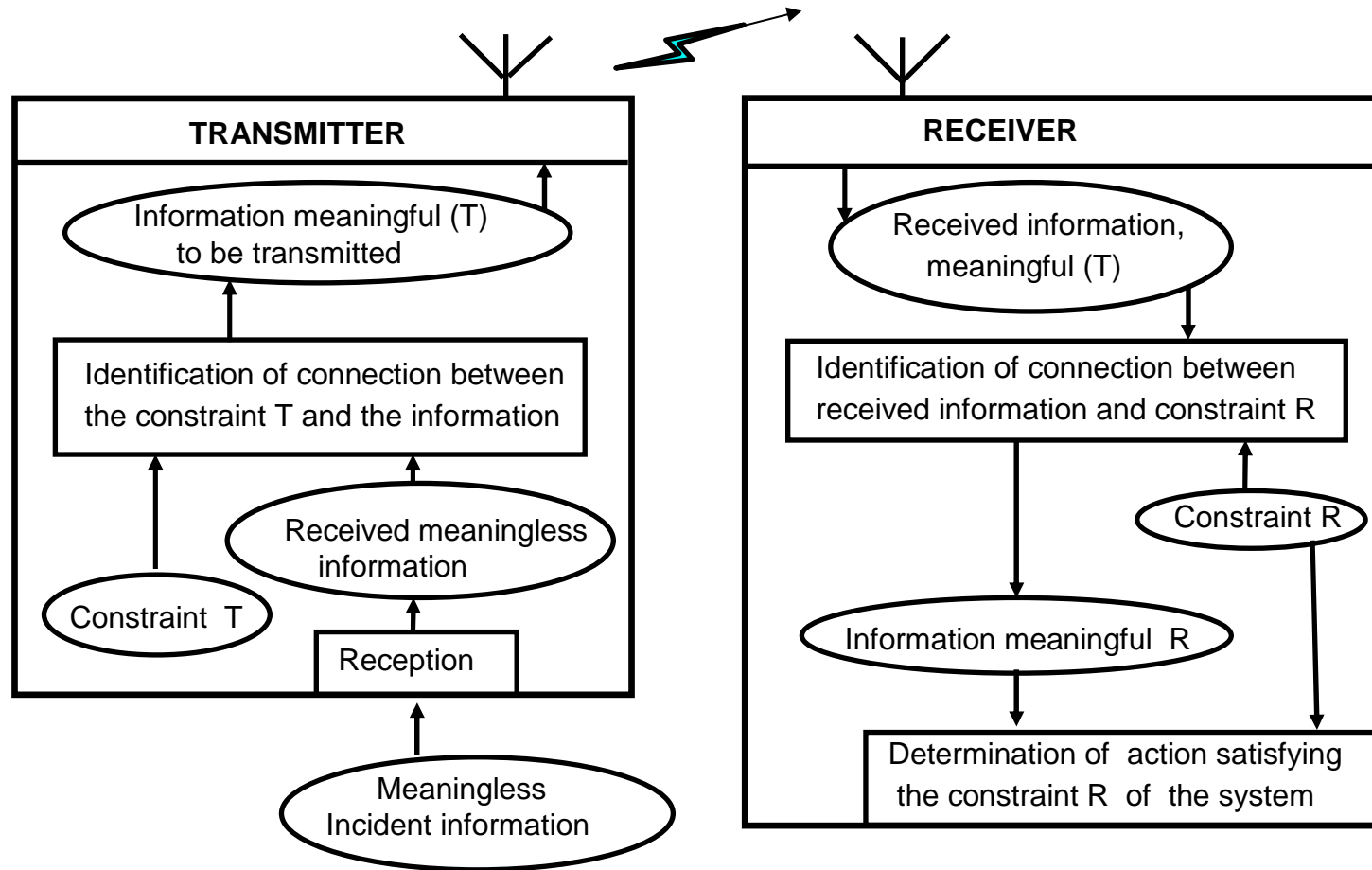


- \* Stay alive constraint => organic meaning generation.
- \* Meaning generation for constraint satisfaction by action implementation.
- \* Meaning does not exist by itself. Is attached to a system that creates it or uses it.
- \* Meaning generation as first step in evolution. Prior to communication and language.

### B.1: Organic meaning generation. Stay alive constraint. [1, 2]



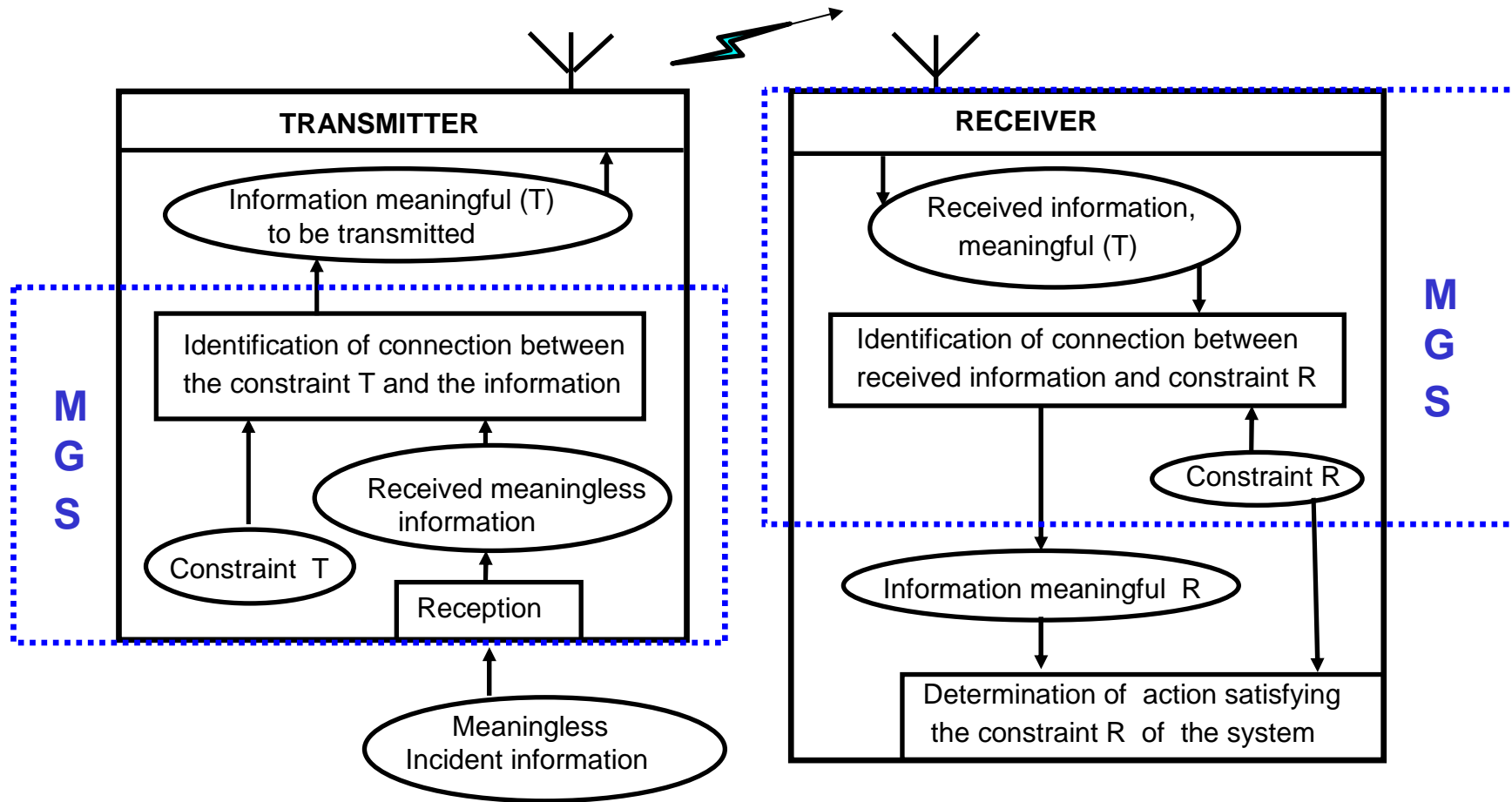
### B) Organic meaning generation and its evolution towards language



\* Meaning transmission from transmitter to receiver. Group life constraints.

B.2: Meaning communication. Group life constraints. [2, 6]

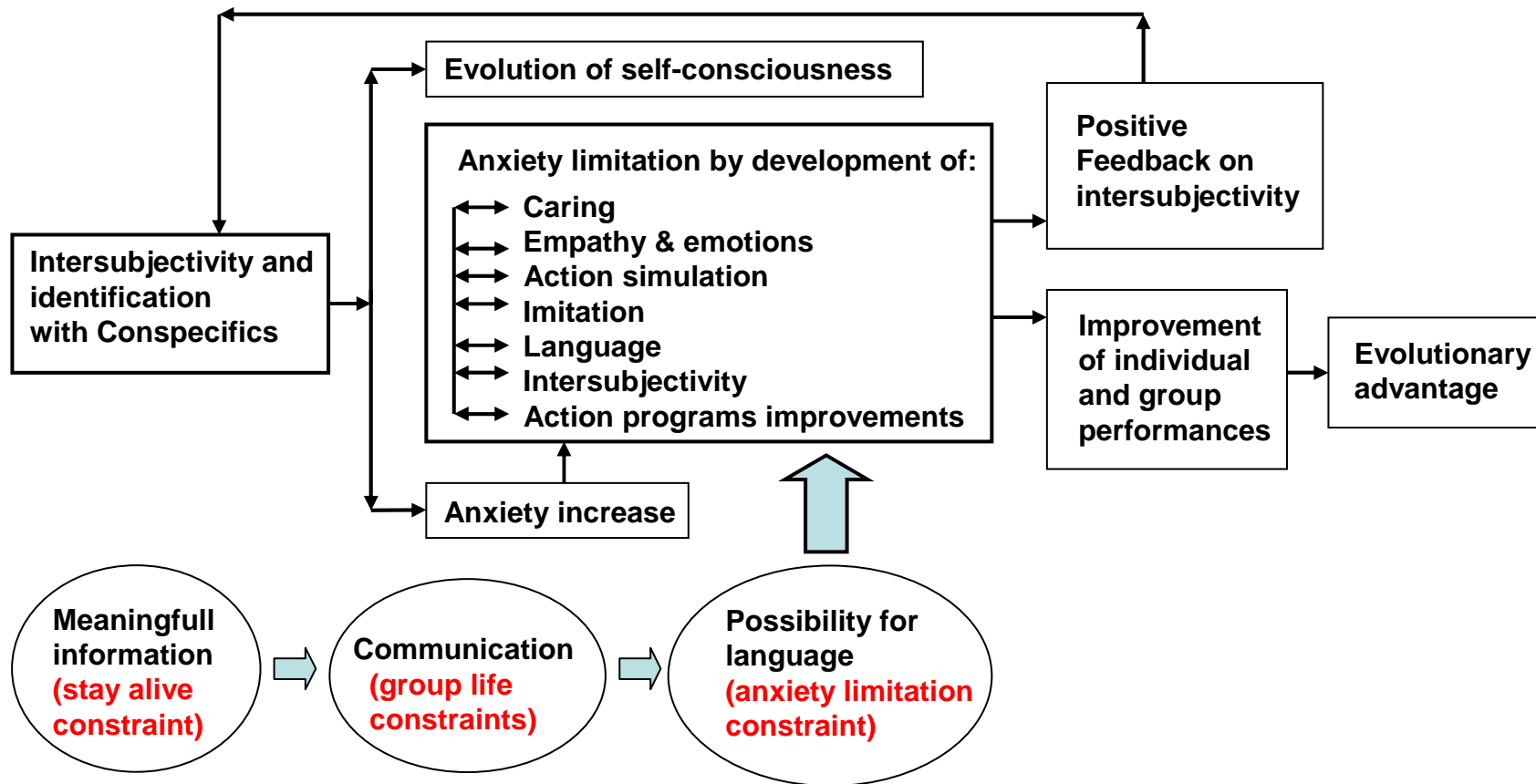
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\* Meaning Generator Systems as driving Transmitter and Receiver.

**B.3: Meaning communication. Group life constraints. MGS.**

**B) Organic meaning generation and its evolution towards language**



- \* Evolution of constraints. Evolution does not plan ahead.
- \* Nature of language is embedded in nature of consciousness.
- \* Evolution of meaningful information → Communication → Language.

**B.4: Evolution of meaning communication towards language. [6]**

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### **Conclusion**

- \* **Evolutionary approach => Nature of language is embedded in nature of consciousness.**
  - **Identification with conspecifics as source of conscious self and of anxiety.**
  - **Development of language for anxiety limitation. Evolutionary advantages.**
- \* **Evolutionary process: meaning generation => communication => language.**
  - **Meaning generation process based on constraint satisfaction.**

### **Continuation**

- \* **Evolution of constraints. Evolution of communication and language. [6]**
- \* **Evolutionary history of intersubjectivity. Links with phenomenal consciousness. [5]**
- \* **Evolution of anxiety/anxiety limitation. Phylogenesis of emotions and feeling. [3]**
- \* **Shared analysis for the evolutions of consciousness and language.**

### **References**

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- [2] 2003. " Information and Meaning " . <http://cogprints.org/3694/>
- [3] 2004 " Performances of Self Awareness used to explain the Evolutionary Advantages of Consciousness". <http://cogprints.org/3715/>
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- [7] 2010 "Evolutionary Advantages of Inter-Subjectivity and Self-Consciousness through Improvements of Action Programs" <http://cogprints.org/6831/>