

Building a relevant Horizon for Literacy of Mind II

**Cognitive Event**

The sense-making process is like a landscape, never stable, always in the making and populated by multiple structures, within which semi-stable states of knowing and understanding emerge and disappear, information is gathered, knowledge is produced, wisdom is forged, insight is carved, mythos is punctuated and states of beyond, at rare times, cool the sweat of the navigators while in darkness and chaos.

We need to build a relevant context where to re-examine and re-define the human act of “understanding” and “knowing” in order for the journey we are embarking upon to be at all possible. The coming few pages follow upon this task.

The etymology of the term cognition provides us some edges. The word derives from the Latin verb cognosco: con – with; and gnosco - to know (from Greek) or to recognize. To ‘know and recognize with’ is a good evoking aspect of the grounds and the modality we are going to immerse ourselves in, as a lab, together. Pointing towards an ever-expanding form of unification between the verbs to know and to recognize\*, an open-ended inter-penetrative cohesion between recognition and knowing.

\***recognition** is meant here via two parallel modalities 1) for ‘knowledge as iteration’ – re-cognize; 2) and for the recreation/re-encounter of oneself, each time, in the act of knowing.

Human investigation of ‘knowing’ dates back at least to the Greek philosophers, notably Aristotle who described ‘knowing and sensing’ as a way for the ‘anima’ (soul / mind) to be ‘all existing things’. Yet the word cognition itself was coined in the period of the Renaissance (15<sup>th</sup> century) where it meant ‘thinking and knowing’. And somehow in a very unfortunate way, its use along the centuries, served the progressive severance between thinking and emotions, which grew parallel to a separation between ‘the human’ (represented as ‘man’) and all the rest of life. The gap between knowing and sensing gradually rose to be an abyss dividing the rational mind on one side and the irrational heart, treacherous senses, emotions and instincts on the other.

At the end of the 20<sup>th</sup> century the term was used in correspondence with a computational model of the mind – strictly ‘human mind’, no other life forms even considered - where cognitive processes were studied almost as software modules, each evolved along time and

shaped by natural selection for solving a specific type of problem/task (i.e. mating, hunting, communicating...). Thus, most of us grew (whether aware or not) within an ecology viewing human cognition as: *'relating to mental processes of perception, memory, judgement and reasoning, as contrasted with emotional and volitional processes'* (dictionary.com, 2017).

From here, at least in part, the irreconcilability of the personal, subjective experience and its substantial modes with any wider discourse on the mind. The mind in the public became a virtuosic argumentation while the depth of the personal quest and thirst entered a dark limbo – to be preyed upon.

In the last 20 or so years new theories of human cognition do bring hope for some reconciliation. Some references are the work of Maturana and Varela (Maturana and Varela, the Tree of Knowledge, 1987, Varela, enacted cognition,) the work of Damasio (Damasio, Descartes' Error, 1994), and of Bateson (mind and nature, steps to an ecology of mind) and the new thinking emerging around the new evolutionary synthesis (Jablonka and collaborators). Though, much time could take for the bridges to become solid and wide (enter academic and cultural mainstream), and we do not really afford the time right now – we'll keep eyes on the process while on the way. Still, it is important to know, we are referring to aspects of those new understandings, together with multiple other lines of thought emerged in the last 30 years, to sketch a new landscape for sense-making and "knowing" and a horizon to our journey into carving a Literacy of mind.

(To do: Library of references to be slowly compiled with articles, posts, blogs, books...).

### **Living as a process of cognition**

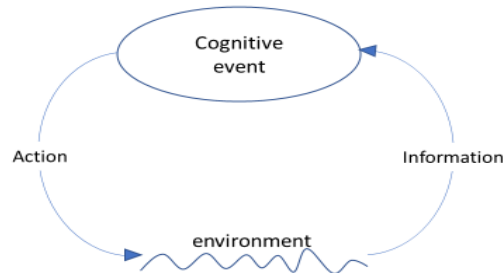
We begin with a living scenario. An ameba in a fluid perceives a sugar gradient (differences in concentration - of sugar - in space) and act upon it moving towards the sugar (according to coded behaviors). So, the basic cognitive event is an action-perception cycle, that yields an organism able to comprehend its own operation in an environment (comprehend does not mean here self-aware nor conscious). Information is continuously extracted from the environment and enacted upon, which in turn extract even more information, and so on.

*"Living systems are cognitive systems, and living as a process is a process of cognition. This statement is valid for all organisms, with and without a nervous system." (Maturana and Varela, 1987).*

Described in these terms cognition is a fundamental characteristic of life (being alive). Any live organism needs to have/acquire 'knowledge' about the environment in which it lives, and from which it extracts resources, in order to remain alive. Being alive means operating in an environment (external, internal, physical, emotional, social, abstract...) in a way that allows one to continue being alive. The organism comprehension of its own operation in an environment is seen as emerging from a coalition of internal and external resources and yielding actions that support the life of the organism - in some aspects it is equivalent to being alive. Cognition could be called the continuous act of being alive.

This of course can grow from the very simple example of the ameba driven by sugar, towards

much higher complexity.



Different living scenario. A beaver in a forest, roams a territory, the water course and the trees around it, and acts upon it by gradually building a dam. By so doing the beaver profoundly transforms the initial conditions of the environment – i.e. water will be higher and more still, different types of fish will populate it, the vegetation around it will become thicker and so on. By this a stream of communications is taking place. The beaver will continuously adapt its behavior to the changing conditions. This process by which an organism ‘knows by modifying its environment’ (*niche construction*) introduces us to the next relevant aspect of a cognitive event.

Cognition is a transformative act, and a communicative act. Streams of information generated in the process and codified in the environment are as well a basis for coordination among different organisms. We cannot speak in terms of an organism in isolation and as external to the picture. The organism is immersed in whatever it is cognizing (whatever it is in the process of knowing) and by so doing it transforms it.

An interesting aspect of this process is that, by modifying its environment, an organism (still lacking a ‘proper’ awareness) actually transforms natural selection pressures over its being alive - in a non-direct fashion. The process generates a feedback through the shared environment\*, the effect of which alters the evolutionary dynamics, on a scale till here underestimated (see the extended evolutionary synthesis). For all practical purposes the beaver by being a cognitive live system, transforms the environment in which it cognizes, which in turn operates as a selector on future versions of the beaver. The organism is taking part in shaping its own evolution! And this is part of an extended cognitive event.

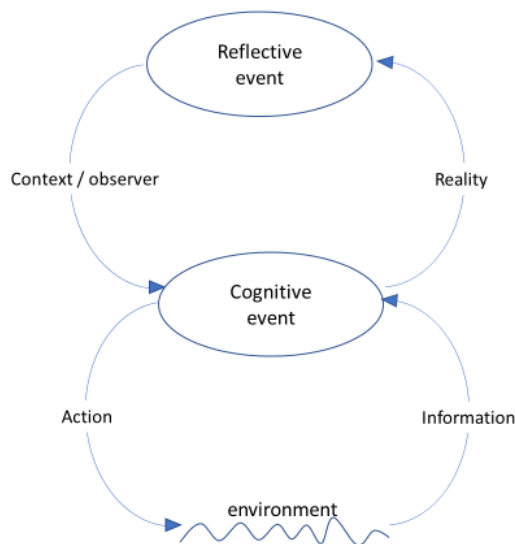
\*the environment is shared both with other organisms/species and across time (beyond specific life-span)

## Reflective event

We are interested in how to represent what takes place when the cognitive event expands a self-aware and conscious mind. As humans we are still immersed and acting upon an environment, yet the environment will be perceived differently in a conscious-aware mind, even very differently, according to the context at play (i.e. for example the context of fighting while in a social setting will evoke a very different set of actions than while fighting in the context of war). The aspects of the surrounding world which inform the emotional, social, cultural, imaginary environment, will suddenly have a presence and impact. For the ameba, or the beaver, the context is mostly set by survival, the way it is embedded in the genetic/body/physical immediacy of the organism (what staying alive entails). In a self-aware conscious mind it extends over multiple layers of context.

In the case of a conscious aware event a multiplicity of factors – as already mentioned cultural, social, emotional, physical, internal and external, and so on – are being reflected in real-time. An 'inner-space' as if opens in the subjective experience where alternative realities and possibilities are reflected – at least in principle.

This inner 'gap' between stimulus and response, between cause and effect, between immediacy and imagination, whether conscious or unconscious, allows a much more complex computation of what "alive" means in the unique and particular moment, in different contexts. We speak of an 'observer' that co-emerges together with the context.



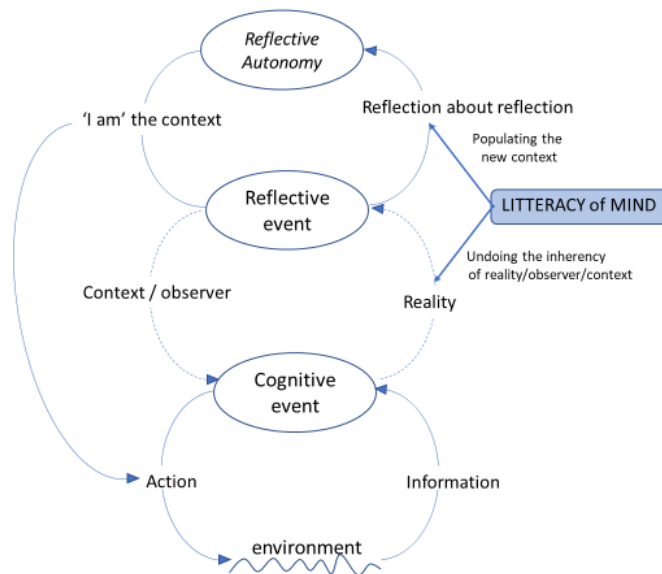
The cognitive event presents a reality within which one acts. The reflective event provides a context where this reality assumes a particular meaning and value. Different contexts will yield

in a particular mind very different actions and reactions. Most of the time the “context” is being set by the situation – a collective agreement (cultural, traditional, religious, social, national, historical, and so on) together with a personal confluence of immediate feelings and resources (tiredness, hunger, excitement, satisfaction...) will attach the context to the reality and dictate the spectrum of possible actions available.

One way to look at this is that the ‘observer’ and the ‘context’ are co-emerging simultaneously. *The observer ‘wakes up’ in a fully set reality, where the spectrum of alternative actions is already contained.* The observer cannot really break-through the confines of the reality in which it arises, from within the same reality, not in any direct fashion, for they are as if one and the same.

### Reflective autonomy

We need to penetrate further, to slide through contexts, to abandon our mind as a battle and cross it as an unknown landscape rich in hints, recent and forgotten traces, and none yet fully written. In order to do it, we need to come simultaneously from the now and from a horizon. We must ignite a further reflective layer, a wider context that will allow a reflection about reflection, and further dimensions after that. We need an interface into the mind, in order to expand a ‘growing edge’ where borders are loosened, time is multiple/malleable and reality can be negotiated with narrative. The development of such ‘edge’ (of consciousness) can be found at different timings and under different traditions and technologies in most, if not all, cultures that populated the history of humanity. We wish to research it under the designation of Literacy of Mind.



*Literacy of Mind* deals with the endeavor of intensifying and coordinating reflectivity. It provokes the possibility for a mind to become aware of 'given' context/reality/observer and undo the solidity and opacity of each.

Intensifying comes with speed and capacity – thus the internal discourse must “grow” in size/scope/intensity in order for the human not to be fully curbed into whichever projected reality (technological or metaphysical), and ‘forget’ to move deeper/higher/wider. Intensity and scope of moments of internal discourse is what allows to gradually de-occupy an internal space and re-populate a new context within which the meaning and value of ‘being alive’ (from the standpoint of cognition/action) is radically redefined.

Within this, *Reflective autonomy* is about becoming aware and influencing which forces one allows or negates authority in one’s reflective space. It stands for the demand to set out to create reference points for one’s reflective events. Autonomy in particular points to the ability of stepping out of the natural drift of events and being able to insert direction into one’s mind and life. As a pointer at the moment it stands for reclaiming responsibility upon one’s actions, rather than consigning and remitting it to the ‘gods’. It speaks of de-occupation and it speaks of inter-subjective alliances.

As long as the motion towards reflective autonomy is active, ‘cracks’ are part of contexts – the reality one perceives is emerging of a continuous arbitrary choice of sort. The inter-subjective ‘we’ based on alliances is a fundamental factor in this process - reflection cannot be closed ‘inside one’s mind’. Reflective autonomy means taking full sized risks and backing up one’s choices in front of a relevant ‘showground’, seeking for the fissures from where realities can be upturned.

“There was a tale he had read once, long ago, as a small boy: the story of a traveler who had slipped down a cliff, with man-eating tigers above him and a lethal fall below him, who managed to stop his fall halfway down the side of the cliff, holding on for dear life. There was a clump of strawberries beside him, and certain death above him and below. What should he do? went the question.

And the reply was, Eat the strawberries.

The story had never made sense to him as a boy. It did now.”  
— Neil Gaiman, *American Gods*