The Inner Interpreter

Of the importance of introspection. Becoming aware of how our brains work may have an impact on our behaviour.
All living creatures are continually exposed to intra and extra-corporeal stimuli but only we, humans, can put those sensations into words and communicate to others what we feel both physically and emotionally.

On the other hand, out of the endless number of stimuli that bombard us simultaneously – visual, tactile, auditory, olfactory and taste – we only become aware of some of these, i.e. we select some of them, elaborate them and transform them into sensations. The same happens with stimuli produced by processes within our own bodies.

Now, how does this selection occur? What sets this process in motion? How are stimuli turned into sensations that we can then “decode” and translate into words?

I will be bold enough to take the interpreter’s case and use it allegorically. Let us imagine for a moment that there is a witness within us that silently perceives, observes, records and interprets – a witness who can stay silent and calm. Let us call that witness our inner interpreter. Deep inside, this inner interpreter witnesses how thousands of perceptions of a different nature are permanently being selected, processed and combined. The inner interpreter then translates perceptual units of one sense into the other senses, and also instincts, feelings and emotions into ideas, actions and thoughts.

Out of an enormously rich variety of elements of all sorts that bombard us, the interpreter within will select and present some organized “units” which he will eventually translate again, if necessary.
As Argentine writer Jorge Luis Borges wrote in Spanish depicting the fruit “naranja” back in 1926, 1

“We feel a round shape by touching, we see a heap of light at dawn, a tingling fills our mouth with joy and we melt those three heterogeneous things into what we call an orange.”

Is it surprising to see in a scientific video2 that the reconstruction of the process in the brain literally follows Borges’ poetic and intuitive description? We can see in the computerized simulation of the video how the “feel”, the “colour”, “the taste” come from different brain areas and are synthesized in the unifying “word”.

It was even more exhilarating to me to find in Jeff Hawkins’ recent book On Intelligence3 (2004) some descriptions of brain functioning that fit my own tentative descriptions of language functioning (as revealed when we speak under pressures of time-space). Hawkins’ hypotheses on the neocortex processes encouraged me to develop these ideas a little further.

“When we assign a name to something – says Hawkins – we do so because a set of features consistently travel together” like in Borges’ orange “the rich glow at dawn, the roundness and the tickling filling our mouth with joy ...”

Let us imagine then some of the processes that may take place when we are babies. I use the word imagine since what follows is naturally based on inferences. When babies are born, they abandon the warm, liquid, sonorous, intimate environment of the womb and enter a dry, airy and probably (for them) chaotic environment full of new and indefinable sensations. Little by little getting used to their new life, acquiring new similar tones and pitches, or new sensations, they start to travel together. They learn how to discriminate between different tastes, sees, touches, and to isolate different traits and repeatedly heard similarities. They begin to develop an internal connection array of normally pleasant and associated with mother, father, objects, in his or her environment.

Connecting, linking, perhaps one of the very first things we learn. This activity presupposes perceiving, observing, connecting, identifying and discriminating different similarities between different elements. When babies – playing with, imagining words, they learn the process through which they learn how to relate different elements when the related elements are from different fields.

What enables us, as humans, to link two different elements to our life experience, through abstracted and synthesized process of language, is the process through which complex whole as when two abstract elements are synthesized into a chemical
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sensations. Little by little – through experience – they start
getting used to their new habitat and they start recognizing
similar tones and pitches of a voice, similar smells and tastes,
etc., across different situations. Similar features that seem
to travel together. They can probably then start identifying
some similar elements within the ever-changing ambiguous
uncertain unknown environment. Let us suppose that at
some given point in time, the baby starts making connections
between different types of sensations: what he/she feels,
tastes, sees, touches, hears. The baby will then eventually
isolate different traits and will link them to certain sounds
repeatedly heard simultaneously with those sensations, mak-
ing an internal connection between – say, “mom”, and the
array of normally pleasant protective nourishing sensations
associated with mother. And the same is true for other external
objects in his or her “world”.

Connecting, linking, binding, associating, relating is per-
haps one of the very first mental activities we engage in.
This activity presupposes other “previous” activities such as
perceiving, observing, comparing, distinguishing, discrimi-
nating, identifying and recognizing similar patterns which
implies discriminating differences and recognizing similarities
between the elements. Repetitive exposure surely counts.
When babies – playing with the sounds – acquire their first
words, they learn the result of the experience and ALSO the
process through which the result was obtained. This means
that when we learn how to relate A to B, we simultaneously
learn how to relate A or B to something else, say C or J, even
when the related elements belong in different levels or to
different fields.

What enables us, as babies, to create the link, to bind
two different elements together is our own experience. This
life experience, through different processes, is eventually ab-
stracted and synthesized. Let us remember here that synthesis
is the process through which separate parts constitute a com-
plex whole as when two or more elements in chemistry are
synthesized into a chemical compound.
Synthesis paves the way for order, for hierarchies, priorities and levels. From this point of view, it becomes the opposite of confusion which dispels, tangles and flattens hierarchies, priorities and levels.

The results of this will be twofold for the baby: 1) "in the reality out there" an individualized entity (or unit) will have been selected out of the continuum of sensations and perceptions on the move, and an object – for example, a nursing bottle – will have been recognized by the baby's brain. And at the same time, 2) a word, a sign will have been created which will enable the child to refer to that nursing bottle or to any nursing bottle in the world, be it present or not.

A concrete life experience gets thus transformed into the bar or relationship between the signifier and the signified in the linguistic concept of the sign, according to Ferdinand de Saussure's intuitions.

Our imaginary itinerary leads us to conceive the symbolizing capacity of man (thinking, reasoning, imagining) as an ever-growing continually self-organizing network of relations. Man's capacity for abstraction allows for an internal organization and re-organization of levels of relations in which his capacity for synthesis plays a fundamental role.

In these simple acts babies perform when learning their first words, there seems to be a blissful seed: the baby is learning to make a connection, a bond between certain sounds and other perceptions. As a consequence of this relationship established between some tangible and intangible elements, a "word" will be born. The wonderful part of all this is that it is not only a word: the word mirrors the entity co-created outside. As babies identify entities outside of themselves, they simultaneously incorporate names that will enable them to bring back these entities whenever they wish, as magic Abracadabra! in a conjuring trick.

There is movement, action, life; discovery and wonder and pleasure in such a simple act as that of a baby learning to talk. There is creativity involved. As when an adult finds the right word and the right sequence and the right means to translate his feelings/thoughts into words. Or when, preferably, the translator translates relationships (of shapes and colors) into a different network, a certain similitude of the alchemy seems to be at work.

"Public speech", as Certain, is only the tip of the iceberg.

From the public arena to the private, the interpreter, "the witness of the unknown" and the "free-will mystics. Le jardin secret", is the place where perceptions find us co-create "our" world.

How we select, choose from the environment and realize them is difficult to speak of. We are involved we call "abstraction" some go.

Since we do not yet possess the process within following the intuitions, we leave the beaten track of the world."

Fortunately, the abstraction occurring at different levels and pattern repeating itself at a parapsychological level, a very concrete pattern before the baby is born, yet not "abstractive" or abstracting the placenta. The placenta is a "grey" area since it is not the nervous systems select...
translate his feelings/thoughts/ideas/emotions and put them into words. Or when, passing from one language to another, the translator translates, turning a certain network of relationships (of shapes and sounds, and signifiers and signified) into a different network of relationships in order to preserve a certain similitude of values, relations and beliefs. A certain alchemy seems to be at work to succeed the “pass”.

“Public speech”, as George Steiner says in *After Babel*, “is only the tip of the iceberg”.

From the public arena where we started, we are now daring to delve inside, exploring the private area where our inner interpreter, “the witness” or “the observer” lives in that intimate space, the “free-will” zone, the secret garden of poets and mystics. *Le jardin secret dont parlait Voltaire*. The cognitive space where perceptions, feelings, and language meet to help us co-create “our” world.

How we select, choose, combine and integrate elements from the environment to constitute entities and internalize them is difficult to describe. The “filtering” process involved we call “abstraction”. We sift elements: some stay, some go.

Since we do not yet have instruments at our disposal to picture the process within, we can only explore the field following the intuitions of certain visionaries who dared to leave the beaten track and defy the “normally accepted vision of the world”.

Fortunately, the abstracting process seems to keep recurring at different levels as a mantra or a mandala or as a pattern repeating itself. In this manner, even at the physical level, a very concrete “abstraction process” occurs even before the baby is born. Its description can help us visualize other abstracting processes. Foetuses feed through the placenta. The placenta filters what it needs from the blood. Whatever is not needed, proceeds. In the same way, our nervous systems select certain things and discard others.
Attention – Focus
The Scientific Orientation In Everyday Life

Since we are taking a look inside, attention must be paid to attention itself.

To some spiritual teachers, attention is the key to the spiritual road.

What do we choose and decide merits our attention?

According to the Oxford Advanced Learner's, attention is the action of applying one's mind to something or somebody or noticing something or somebody; special care or action; kind or thoughtful act.

Attend is to apply one's mind steadily; to give careful thought.

Tend is to take care or look after; be likely to behave in a certain way or to have a certain characteristic or influence; to take a certain direction.

A very subtle internal movement, an imperceptible attitude seems to underlie the direction we give to our attention.

"Attention is an exceptional state which does not last long since it contradicts the fundamental characteristic of psychic life: change" said Ribot. And he quotes Maudsley saying:

"He who is incapable of governing his muscles is incapable of paying attention".

Also in the 19th century psychologist William James wrote:

"volitional effort is effort of attention ... effort of attention is thus the essential phenomenon of will".

In the 21st century, other researchers point in the same direction. After having obtained some success in the treatment of patients with obsessive-compulsive disorder, psychiatrist

Jeffrey Schwartz\(^5\) contends power to reshape itself.

“Attention can sculpt down the rate at which since we know that fire makes them grow sturdy important ingredient in

From the very outset explicitly, I have emphasized. Attention, focus, couple, speakers and listeners.

Listening for implied tangible and the intangible, the figures, details and back ships, actions and essence and how he is saying it sitting, who is sitting by Notice how people treat and he smokes.

These and many other formulate hypotheses and consistency of his spec ulation will foster percept and to act.

"Correct predictions result in con tention."\(^7\)

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5 Jeffrey Schwartz and Sharon ticity and the Power of Men

6 Neuroscientist Ian Robertson in The Mind and The Brain,

7 Jeff Hawkins, On Intelligence
Attention must be paid to attention. It is the key to the spirit.

What attracts our attention?

For Learner's, attention is something or somebody; special care or action; steadily; to give careful be likely to behave in a characteristic or influence; to an imperceptible attitude live to our attention.

It which does not last long characteristic of psychic notes Maudsley saying:

William James wrote:

"Attention ... effort of attention. Attention, focus, concentration. Paying attention to people, speakers and listeners, to their history and background. Listening for implied and hidden messages. Observing the tangible and the intangible; observing closely forms, shapes, figures, details and backgrounds, contents, histories, relationships, actions and essence. Listen to what someone is saying, and how he is saying it, and to whom. Look at where he is sitting, who is sitting by his side, in front and behind him. Notice how people treat him, how he walks, what he eats, if he smokes.

These and many other data will enable the interpreter to formulate hypotheses about the speaker’s intent, about the consistency of his speech and the veracity of his words. Observation will foster prediction. Prediction is necessary to interpret and to act.

"Correct predictions result in understanding; incorrect predictions result in confusion and prompt you to pay attention." 7

Jeffrey Schwartz 5 contends that attention gives the brain the power to reshape itself.

"Attention can sculpt brain activity by turning up or down the rate at which particular sets of synapses fire. And since we know that firing a set of synapses again and again makes them grow stronger, it follows that attention is an important ingredient for neuroplasticity". 6

From the very outset of this book, either explicitly or implicitly, I have emphasized the importance of paying attention. Attention, focus, concentration. Paying attention to people, speakers and listeners, to their history and background. Listening for implied and hidden messages. Observing the tangible and the intangible; observing closely forms, shapes, figures, details and backgrounds, contents, histories, relationships, actions and essence. Listen to what someone is saying, and how he is saying it, and to whom. Look at where he is sitting, who is sitting by his side, in front and behind him. Notice how people treat him, how he walks, what he eats, if he smokes.

These and many other data will enable the interpreter to formulate hypotheses about the speaker’s intent, about the consistency of his speech and the veracity of his words. Observation will foster prediction. Prediction is necessary to interpret and to act.

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Then the interpreter will check the hypotheses against the new data gathered through the experience of the meeting and the contact with speakers and through the discourse itself. Some of such hypotheses will be confirmed, others rejected and/or transformed, and new ones will be elaborated.

What we would like to add at this point is the need for the interpreter - any speaker or human being for that matter - to also pay attention within. Pay attention inside, to what he/she is feeling, sensing, thinking, wishing.

Throughout the 20th century we have mostly been taught in the Western world to pay attention to the outside world, to rely on our senses, to demand verification, to expect “objectivity”. There is nothing wrong with that provided we do not forget to revise our own assumptions and beliefs underlying our search for “objectiveness”. Looking inside ourselves may prove fundamental. It is perhaps the interweaving of the observations from within and from without that provides us with our more reliable tools in life.

Some of the humblest human beings I have met are scientists. Those at the frontier of knowledge know better than others about the precariousness and the partiality of their own views.

This healthy unpretentious scientific approach, respectful of the mysteries of the universe and conscious of our limitations and potentials could easily be applied by all of us in our everyday lives. Indeed, Wendell Johnson⁸ has suggested four basic steps to what he calls “the scientific method in everyday life”:

1. asking clear answerable questions,
2. observing,
3. reporting as accurately as possible and
4. revising assumptions and beliefs in light of the observations made and the answers obtained.

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We could also translate the following four steps: 1) selves using all our senses, 2) observing, 3) formulating hypotheses, 4) formulating hypotheses.

This came easily to those of them to following quite a simple way of asking who is saying what for what purpose. 2) of their own - hopefully accurately and discerning and evaluating them by their own. And in so doing, things and emotions, disassociating and evaluating them inside you as you are.

Being able to redirect implies being in comm
We could also translate this “scientific method” into the four following steps: 1) observation inside and outside ourselves using all our senses, 2) experimentation, 3) testing, verifying, 4) formulating hypotheses again.

This came easily to me since, as an interpreter, I was used to following quite a similar path at work: 1) the clear answerable questions being the simple questions I should always ask: who is saying what to whom, when, where and for what purpose. 2) observing, 3) my “version” became my own – hopefully accurate – real-time reporting in a different language, 4) I had to revise my own assumptions, hypotheses and beliefs in the light of what I had heard, seen and translated.

I said that one of the aims of this book is to succeed in bringing about a shift in attention, making you, the reader, focus on things or aspects of things you would not normally have considered – both externally and internally. The first shift, then, is to pay as much attention to what is happening inside you as you do to what is happening outside of you. And in so doing, try to navigate through your own feelings and emotions, distinguishing them from one another and evaluating them instead of simply being carried away by them.

Being able to redirect our attention and shift its targets implies being in command of our own selves.