

## **HOW WE THINK: How It affects Sustainability**

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Our present model related to Sustainable Development has followed our current day “way of thinking”. That is, it depends heavily on the use of rational and logical thinking.

With this dominant system of thinking we have been having only limited success in the whole world of Sustainable Development. Following new research by Iain McGilchrist, related to Right and Left Hemisphere brain thinking processes, and its long history we are now being able to see more clearly the actual work of each hemisphere. In the conventional process to date most right hemisphere brain thinking in organizations has somehow become excluded over many generations, and in society as a whole only left hemisphere logical, rational thinking has been accepted as valid.

Now we have new research that reveals some incredible and different abilities that indicate clearly the Genuine Value of our right brain in our overall thinking about Life and Work in our society in general. This new research “turns the table” as such, allowing the right hemisphere of our brain its true and indispensable role for ALL sustainable development work.

This short paper develops these revelations and their benefits for humanity and our organizations in all we attempt to do every day everywhere. As a result, we will then truly begin to accept that the right hemisphere of our brain is our “Master” and the left hemisphere is our “Emissary” (McGilchrist, 2009). This new research forms a genuine and careful place for the Right hemisphere in all that we plan in life and work every day as well as the importance of the left hemisphere as its Emissary, (not the Master as is presently the case), as well as a new viable Balance between all Right and Left brain thinking in all dimensions of business, community development and everyday life.

*Keywords:* abstract, sustainability, right/left hemisphere thinking

## INTRODUCTION

At present we seem to be facing stiff resistance to any approach for business management that does not include **FIRSTLY** logical and rational thinking as key and prominent in all sectors related to Sustainability. This affects everything from all business, to governments, and all the way to educational institutions and community development. As has been said many times, Business has become the most powerful influence of any sector related to how even governments can act and react, and as a result the way in which all society is affected.

Now it appears, that in the study of Sustainable Thinking, our human nature can accept learning something new about ourselves, and “how we think” at all levels. This new thinking can affect dramatically how Sustainability in general is received, and can realistically move us from placing dominant emphasis on human capacities for logical and rational thinking, to a **NEW** balance in thinking between the two hemispheres of our brain-----that is, accepting that the right hemisphere is vital for genuine long term Sustainable thinking. Moving forward, based on new research, the right hemisphere of the brain appears now to be the “Master” in our thinking and the left hemisphere is the “Emissary” (McGilchrist,2009).

However, throughout many generations, even very highly respected, thoughtful and influential visionaries have been aware that we as humans have both Right and Left hemisphere brain capacities, both of which are essential for genuine Sustainability. But these important visionaries have had difficulties in convincing especially the business community. They have also been faced with the usual interpretation of “that is fine for people who are spiritual” but do not solve the challenges in the **REAL** world of business”. Now, that outlook is changing slowly with McGilchrist’s work. We are now learning new facts related to “how we think”.

Very slowly we are all learning new information related to how our brain works, and how the functioning of all human beings involves usage of both right and left hemispheres, in a new way involving new research of the brain. With this new research, including the interpretations of the “spiritual aspects”, the right brain has been exposed as never before, through highly respected research, to look at “how we think” in general. This also provides new validity to many aspects of our new Sustainability picture.

These new findings by McGilchrist are having some broad acceptance in even scientific studies, in different parts of the world. These research results have the potential to change how we view Sustainability and thus **ESTABLISHES THE CONCEPT OF SUSTAINABILITY ON A TOTALLY DIFFERENT BASE**. This places the right hemisphere of our brain into a new place of importance, as well as defining more clearly the important, but different function of the Left brain. As such it switches the places established by our society in general for right and left hemisphere brain thinking. The “master” becomes the right hemisphere of our brain and the “emissary” becomes the left hemisphere -----exactly the opposite of what we now normally see in business especially. However, the left hemisphere (which has for many generations been the master in our

thinking), now fulfills a very important but different role-----that is, putting the long term visions and ideas of the right hemisphere into daily practice. (This involves an area that the right hemisphere is not capable of doing ----that is, putting things into practice ). Right and Left hemispheres in fact begin to work very closely together.

This paper relies heavily on this subject of “right and left hemisphere functions “ , and it has been very controversial for many years. Now we finally have some key science based facts related to Right/Left thinking , by Iain McGilchrist, and we see how it affects everything we think and do every day.

Firstly, the Yale University Press , that published McGilchrist’s book, summarizes the book as follows:

“ Why is the brain divided? In this groundbreaking book, based on a vast body of recent experimental research , Iain McGilchrist argues that the left and right hemispheres have different insights, values and priorities. Each has a distinct “take” on the world—mostly strikingly, the right hemisphere sees itself as connected to the world, whereas the left hemisphere stands aloof from it. This affects our understanding not just of language and reason, music and time, but of all living things: our bodies, ourselves and the world in which we live.

We need both hemispheres; but, McGilchrist argues, the left hemisphere has become so far dominant that we’re in danger of forgetting everything that makes us human. Taking the reader on an extraordinary journey through western history and culture, he traces how the left hemisphere has grabbed more than its fair share of power, resulting in a society where a rigid and bureaucratic obsession with structure, narrow self self-interest and a mechanistic view of the world holds sway, at an enormous cost to human happiness and the world around us.”

To quote a few words from the author himself, McGilchrist states in his book:

“ Self awareness, empathy, identification with others, and more generally inter-subjective processes, are all largely dependent upon .....right hemisphere resources.” (p.57)

“Despite the right hemisphere’s overwhelmingly important role in emotion, the popular stereotype that the left hemisphere has a monopoly on reason, like the view that it has a monopoly on language, is mistaken. As always it is not a question of ‘what’ , but of ‘in what way’ . In fact reasoning is of different kinds, and though linear, sequential argument is clearly better executed by the left hemisphere, some types of reasoning, including deduction, and some types of mathematical reasoning are mainly dependent on the right hemisphere” (P.64/65).

“Despite the left hemisphere’s conviction of its own self – sufficiency everything about the relationships to one another and to reality suggests the primacy of the right hemisphere, both in grounding experience (at the bottom level) and in reconstituting, left-hemisphere-processed experience once again as living (at the top level). We have also

seen that many important aspects of experience, those that the right hemisphere is particularly well equipped to deal with –our passions, our sense of humour, all metaphoric and symbolic understanding...all religious sense, imaginative and intuitive processes—are denatured by becoming the object of focussed attention, which renders them explicit, therefore mechanical, lifeless.” (p.209).

These changes mean new responsibilities for all business organizations as well as societies as a whole, including what we are being taught, especially in universities.

The “human element” in this new research will then begin to occupy its new place in society for human development. This has become extremely important, as it is a subject that has experienced much controversy over the years. Up until the present, we have tended to place unlimited importance on logical, and rational thinking (left brain thinking), and have at the same time discounted the importance for our future of taking seriously the key role of the right hemisphere. This has resulted in a series of new challenges related to Sustainability in general, and especially longer term planning.

The big question is: WHEN HAVE WE EVER IN MODERN TIMES THOUGHT OF THE RIGHT HEMISPHERE OF OUR MIND BEING “THE MASTER” AND THE LEFT HEMISPHERE BEING OUR EMISSARY? (McGilchrist, 2009)

This is what we are learning, in spite of the fact that the two hemispheres are apparently in close communication. THE RIGHT HEMISPHERE (based on McGilchrist’s important new work) “sees the big, long term picture “ of the world, and THE LEFT HEMISPHERE finds ways of putting these ideas gained from the right hemisphere, into practice. (As indicated previously, this process of putting ideas into practice the right hemisphere cannot do). Both hemispheres are important, but the sad part is that we have discounted the very hemisphere that is our “master”. This changes our way of thinking completely, and much of our problem with Sustainability has kept us still thinking that the left hemisphere can do EVERYTHING , when it apparently cannot. Both need to be considered and we need to relearn basically “how we think”, using both hemispheres.

One may realistically ask: How many “experts in Sustainability” do you know who have basically changed their way of thinking completely concerning the introduction of sustainability, and keeping logical thinking in every task we touch? In other words, are we still basically left brain logical , rational thinkers first , but try to implement changes towards sustainability, and wonder why it is so difficult? Do we feel that we can have genuine sustainability while still thinking in the conventional logical fashion in almost everything without realizing it? After all we have mostly all been brought up and educated thinking about almost everything through logical eyes -----and many feel that has been OK ? Are we now seeing the beginning of questioning, where the knowledge we have gained throughout our work and life has always been accepted as “of course, as it is based on good logic and rational thinking”? After all , have we always needed logical thinking as the important basic criteria to have what is considered positive results in everything we do?

## B HOW DO THESE CHANGES IN RIGHT/LEFT HEMISPHERE FUNCTIONS OR “HOW WE THINK” AFFECT US?

What does “how we think” really mean for everyday life?

It is obvious that any changes in the way we think have repercussions on everything we do and say. One important result appears clear: One begins to think about one’s own position in society, and realizing that the whole world of competitiveness for personal gain is affected, and now we sometimes think “about the whole” instead of “me”. That means co-workers and neighbours in our community become very important for our own happiness in life as well -----the “me” society tends to become a “we” society.

1) How do we teach genuine Sustainability?

It appears from all indications that the culture and previous education have a significant affect. One example I can quote briefly happened when I lived and worked in Latin America.

I was teaching at a university in Mexico at the time, and there began a lot of exchanges at Universities in teaching programs and as a result what we teach in Latin America and United States.

In this case it happened in the Engineering Department in an important university in Mexico. The Mexican university was using, as its main text , the same book as was being used in the US ----but translated into Spanish. Therefore the student group in the US and Latin America were using the same book as their main text.

The surprise came following graduation. The 2 groups had completely different results. The cause finally appeared to be how the professor teaches a course is very much influenced by the culture and “way of thinking” of the country, and as a result how the professors “thought” and “taught” the same material. It appeared to be very influenced by “the way of thinking” even though both professors were considered very well qualified in both countries. In looking at “the way of thinking” in the two countries, the differences were significant, but that was not fully realized until the final results were analyzed.

Why were there differences in thinking?

The first reaction is of course related to cultural differences. However something else seemed to be involved related to ‘how we think’. In other words : what differs in the “concepts” of how the 2 groups were thinking?. Both groups have obviously been affected strongly by how their two professors treated the material in the book , both in thought and demonstratively so, treated the material in a similar way according to how they viewed it--but here we see the distinct differences resulting in different results. Following that we see 2 different “takes” as such on the same book material. The Left/Right upbringing, education and views of the 2 professors are important.

Some professors are more educated and experienced in a society for Left hemisphere prominence, with more specialization, rational/logical thinking and detailed analysis--- more North American. Meanwhile the Latin American professor is more schooled generally on whole systems including human effects than on detailed rational thinking --- more right hemisphere. In general, we then see that the North American professor more logical and rational in detailed specifics and the Latin American more specialized in relationships with the bigger picture, (plus the human side).

Both approaches are viewed as necessary and important -----but not one alone. The Left brain is important in all business studies, as it has the special job of putting right brain thinking into practice daily. (Putting things into practice the right brain cannot do). On the other hand, the right brain is considered vital in the first place -----it develops the long term planning for all our activities. But we need both, as we firstly need to plan for the “big long term picture “ of our activities (right hemisphere), and secondly we need to put these long terms ideas or picture into practice. (left hemisphere). As has been indicated many times in this paper, our present problem is that we are actually using only the Left brain for everything--- as Master and as Emissary. As indicated, we need to change this custom to achieve genuine sustainability. We now need the Right Hemisphere as first place in the planning and long term thinking in everything we do. The Left Hemisphere then comes into number 2 place, and puts into practice the ideas and long term vision of the right hemisphere.

2)What do we do first?

Firstly, we need to look carefully at ourselves, and how we Personally think , in spite of the books we use. It appears that whether we are aware of it or not, we will tend to put an “interpretation” on the material which shows our own interpretation. Therefore, especially when approaching new ideas it is very important to be sure how we ourselves have accepted these new ideas. (especially right hemisphere new ideas related to Sustainability in its full sense).

It is also interesting to note that often we can continue to use the same books, (with some new ones added). In the education field especially, some ideas will become a good source for student discussions. In the business field, it becomes more important than ever to listen closely to the ideas of participants at all levels, and to think long term before taking actions.

### C). WHAT DO VISIONARIES THINK?

It seems that all these important visionaries, (among many) both present and past have already perceived our problem, and we need to heed their important insights if we hope to construct genuine Sustainability Thinking for the future. This need takes into account the full spectrum of our activities, including all business, education, governments and society as a whole.

ALBERT EINSTEIN :

*“We cannot solve our problems by using the same kind of thinking that created them”*  
(Einstein, Calaprise on Einstein, 2000).

It appears obvious that we have been trying to do just that. We use our well developed logical/rational thinking to solve problems which using only these left hemisphere areas of our brain to understand. We often forget about also taking seriously consideration of the fact that we also need the right hemisphere, and giving it a true place, and not just cursory attention. In the statement by Einstein he obviously realized, that many years ago, that the left brain thinking alone cannot solve the problems of the 21<sup>st</sup> Century.

*“We are attempting to cope with the conditions of the 21<sup>st</sup> Century with the thinking Of the 20<sup>th</sup> Century “*

It appears Einstein knew very well that we can never hope to really understand the present problems in all its dimensions if we do not consider a vital part of our thinking, that is, the right hemisphere where the full and long term picture of our reality lies.

IAIN MCGILCHRIST:

*“ The MASTER and his EMISSARY: The Divided Brain and the Making of the Modern World”.* (McGilchrist 2009).

The title (above) of McGilchrist’s book says everything. We have been mistaken in continuing to use only our logical/rational capacities of our brain , and clearly hope to have success with genuine Sustainability. We have left out the “Master”, our right hemisphere and felt we did not need it when we are so good at logical thinking, that society has taught us . How wrong we have been and still use this way of thinking. We naturally need the left hemisphere to put right hemisphere ideas into practice (McGilchrist), but we have gone the step further and felt we can do it all , much to our continuing confusion when studying long term results. We need to learn how to use our marvellous brain to its fullest -----that is, putting the right hemisphere in it true place as McGilchrist has said , as our MASTER, and the left hemisphere as its essential EMISSARY.

DAVID KORTEN:

*“That which cannot be observed or measured. Such as spirit and consciousness, came to be excluded from consideration by science (objective thinking)... And therefore from the scientific perspective, does not exist” (Korten, 1999)*

The right hemisphere thinking which governs “the big picture and long term ideas” appears to either have been forgotten or purposefully left out of our consideration when thinking about or working towards genuine Sustainability. We apparently consider only the left hemisphere (which includes the science perspective as we have been taught), has any meaning.

Korten indicates very clearly what we need to do in terms of “how we think”, as a key step: accept the need for the right hemisphere thinking as essential, plus place the left hemisphere in its Real Place -- following its work once the right hemisphere has shown us the “big picture”. It appears absolutely essential, according to Korten, to actually firstly translate the “big picture” (of the Right Hemisphere) into practices that benefit the long term whole system. Then we have taken a key step in terms of accepting genuine sustainability. Without this step we continue on with the left hemisphere “still in charge” and methodologies, and practices that relate to only the left hemisphere-----that is not genuine sustainability and we will be carrying on as we are at present -----as Korten indicates, we are working “as if the right brain (where consciousness, amongst many other attributes) does not exist”.

*“The old economy of greed and dominion is dying. A new economy of life and partnership is struggling to be born. The outcome is ours to choose” ( Korten, 2014).*

WILLIS HARMAN:

*“ The key step to our bringing about change is eschewing the negative vision (purely objective, positivistic thinking)... and choosing a vision that benefits our inner purpose and that of those around us “ (Harman, 1998).*

This statement once again brings us clearly to the forefront of the importance of the right hemisphere thinking . This hemisphere provides a positive foundation for all our development on which the left hemisphere can follow to construct practices which accomplish this transition to genuine sustainability.

*“**This emerging trans-modern worldview, involves a shift, in the locus of authority from external to ‘inner knowing’ . It has basically turned away from the older scientific view..... The core of the current challenge to the scientific worldview can be taken to be ‘consciousness’**”(Internet: <http://www..crossroad.to/Quotes/paradigm-shift/harmon-willis,htm>).*



ERVIN LASZLO:

*“ Values and beliefs determine the ways we perceive the world and suggest the ways ...we behave”*

*“ The Dis-ease of the Western Mind: Curing it involves blending the holistic world of the right brain with the pragmatic, skilful world of the left brain”*

( [www.huffingtonpost.com/ervin/laszlo/](http://www.huffingtonpost.com/ervin/laszlo/))

In this article, Laszlo indicates clearly what he feels is the downfall in our thinking at present that is causing “the Dis-ease of the Western mind”. He also has a solution, related to the basic functions of our Right and Left hemispheres of the mind usage. This we hope will now be more easily recognized with the new research by McGilchrist.

These visionaries have shown us that their insights are an important key to future business related success. We obviously need to learn a lot, especially related to new research now available, and especially with reference to “how we think”, bearing in mind how the future will depend on how we perceive our RIGHT and LEFT hemispheres “real” function .

D. Changes to come:

- 1) “Way of thinking “ in organizations: We will see organizations that are still very dependent on the importance of Left hemisphere thinking, but will have a different basis. Left hemisphere work will be built on the basis of right hemisphere leadership. We will see a new balance in organizations. The right hemisphere becomes the true Master and the Left hemisphere will become extremely important in constructing new systems and procedures which satisfies this leadership of the right hemisphere.
- 2) Human Aspects: Take seriously into account “the welfare of the “whole”, and a long overview in planning becomes necessary. TRUST for example becomes hugely important. Employees must feel their ideas, and they as people really count. Leaders need to emphasize. New skills in “leadership” that are human based, not just “managing” an area.
- 3) We will see a strong development of the concept of “community”, as the process of genuine Sustainability takes all people at all levels into account, especially as the importance of right hemisphere thinking becomes known in Leadership.

- 4) We will see a movement from very large to smaller, more local companies as the concepts of right hemisphere thinking (especially related to the human element) becomes more prominent.
- 5) Leadership: This area will develop in a new way, putting their right hemisphere thinking in its new and key place.

Following we find two overall schematic summaries which help to illustrate some of the new research by McGilchrist. Especially it should be emphasized that these summaries are only a simple assistance to the real research explanations provided in his book, the Master and his Emissary, but hopefully can help the reader in visualizing some of the new realities that we are facing in our everyday work and life.

## HOW OUR BRAIN WORKS

### CONVENTIONAL THINKING

LEFT BRAIN	RIGHT BRAIN
<ul style="list-style-type: none"> <li>--- MASTER OF ALL BUSINESS AND PLANNING</li> <li>--- MASTER OF ALL SOCIETAL ACTIVITIES.</li> <li>--- ALL LOGICAL/RATIONAL THINKING THROUGHOUT, INCLUDING EDUCATION</li> <li>--- SHORT TERM THINKING</li> </ul>	<ul style="list-style-type: none"> <li>--- SPIRITUALITY</li> <li>--- CONSCIOUSNESS AND EMOTIONS</li> <li>--- NO CONNECTIONS TO LOGICAL/RATIONAL THINKING.</li> <li>--- LONG TERM THINKING (IE: NATURE)</li> </ul>

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## GENUINE SUSTAINABLE THINKING

### LEFT BRAIN

- ACCEPTS POSITION AS EMISSARY OF RIGHT BRAIN “BIG PICTURE” THINKING.
- BASIS FOR DEVELOPMENT OF ALL IDEAS: “RIGHT BRAIN” THINKING.
- RIGHT BRAIN CANNOT PUT ANYTHING INTO PRACTICE AND NEEDS LEFT BRAIN TO DO SO.
- SHORT TERM THINKING

### RIGHT BRAIN

- MASTER OF ALL “BIG PICTURE” DEVELOPMENT.
- EXPECTS LEFT BRAIN TO PLAN HOW TO PUT BIG PICTURE IDEAS INTO PRACTICE.
- SPIRITUALITY, CONSCIOUSNESS AND EMOTIONS
- LONG TERM THINKING

### WHAT DO ALL THESE CHANGES REALLY INVOLVE?

Briefly, we are trying to provide some assistance for business and other organizations based on the new research concerning right and left hemisphere thinking. We cannot continue to rely solely on the left hemisphere for all guidelines, as we now know that the right hemisphere is in fact the only area that has the capability of “seeing the big picture”. We are in fact looking at the long term viability of Earth, based on both Nature and incredible Human capacities. We are for the first time finally hopefully accepting that , as important as left hemisphere thinking is, we need something to provide the left hemisphere “direction” . TODAY WE HAVE A POSITIVE RESPONSE.