Transforming Ourselves First.
The Need of a Paradigm Shift in Peace Research and Peace Education
by Francesco Pistolato, PhD

Gandhi’s invitation to self-change

Real Masters (with a capital M) are few, and they are not taken literally or, less diplomatically, they are not taken seriously. Gandhi is no exception. When he meant that the world can only change, if we start changing ourselves\(^1\), he was inviting all of us to a change, not only the perpetrators of violence.

When I tried to explain this to the best possible audience – a bunch of very clever young people with already a remarkable experience on the field (and at the always encouraging presence of IIPE’s Director Tony Jenkins), in July 2019 at the Home for Cooperation in the buffer zone of Nicosia, Cyprus – my message was not very successful.

To be sincere, I expected this failure. Apart from a communicative limitation due to my almost lost fluency in spoken English, the time of a seminar was too short to allow an adequate transmission of concepts people

\(^1\) The often repeated quote: “Be the change you wish to see in the world” seems not to be literal. According to Supriya Kelkar, author of the novel *Ahimsa* (2019 New York, Tu Books) the quote is actual a reduction of a larger passage, in which Gandhi said “If we could change ourselves, the tendencies in the world would also change. As a man changes his own nature, so does the attitude of the world change towards him...We need not wait to see what others do.” (from: https://blog.leeandlow.com/2017/10/03/did-gandhi-say-be-the-change/, last visited on April 18\(^{th}\), 2020)
are not familiar with, especially if they apparently clash with common sense and the accepted idea of what is science like.

Here I shall go again into my argument and try to be clearer then I was in Cyprus. The time elapsed since then has allowed me to deeper reflect on what Gandhi possibly meant by transforming oneself.

As I’ll try to demonstrate in the following pages, I believe that Gandhi’s suggestion can be enormously fruitful for both Peace Research and Peace Education.

**Satyāgraha**

We know that Gandhi gave his nonviolent struggle the Sanskrit name of Satyāgraha, meaning “recourse to truth-force”. Truth and love are not only intimately linked in Gandhi’s vision, they are but one thing:

> “The force of love is the same as the force of the soul or truth. We have evidence of its working at every step. The universe would disappear without the existence of that force. […] If the story of the universe had commenced with wars, not a man would have been found alive today. […] The fact that there are so may men still alive in the world shows that it is based not on the force of arms but on the force of truth or love.”

So, the Satyāgraha is based on the very law that rules the world and allows humans to exist. This force is love, which for Gandhi cannot be separated from truth. No human world is possible without the love-truth force.

However, the struggle based on Satyāgraha requires a special preparation, that is a previous purification from the remnants of violence within us.

This is because the presence of the love-truth force as a base for the existence in this world is not immediately evident. We as human species are not born intrinsically violent, but we are definitely born and grown up in manifold violent societies. The consequence of this is that we definitely carry with us a whole bunch of violent habits, hardly mitigated by our polite manners and formal education, if we happen to have them. This leads us to

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3 The idea of the humans as being innately violent has been rejected by the Peace Research. See the Seville Statement on Violence 1986 in: [https://unesdoc.unesco.org/ark:/48223/pf0000094314](https://unesdoc.unesco.org/ark:/48223/pf0000094314) (last visited on April 18th, 2020)
Statement No. 1: The first job of a peace worker is to get rid of this personal burden of violence.

An even previous job is to become conscious of this personal burden. The very fact that we are against war and violence, that we spend a lot of time and energies in campaigning, in educating young people to global citizenship, in giving lectures about conflict resolutions and so on, does not make us any better - possibly not even better of our violent counterparts - if we persist in believing, consciously or unconsciously, that we are somehow good enough for this society that we want to amend.

This does not mean that we have to wait to become like Saint Francis of Assisi before doing anything for peace. It only means that we should better not throw stones of judgments against anyone and rather clean our home, before teaching others how to clean theirs.

Statement No. 2: Violence is not only in deeds and omissions at various levels - Galtung’s direct, structural and cultural violence⁴ - but is first of all in thoughts and emotions⁵.

This is equal to say: “Thoughts and emotions are forces, they are energy that can cause visible effects on the outer world”. An utterance rather hard to accept within the conventional borders of what is held to be scientific.

Heart coherence and the magnetic fields of the Earth

However, I think I can show the there is enough scientific evidence behind this. The Heartmath Institute⁶ openly maintains that violence in thoughts and emotions causes lack of coherence in our heart, whereas heart coherence “measures order, stability, and harmony in the oscillatory outputs of the regulatory systems during any period of time”.

They explain that the human heart influences the magnetic field around the body and through this also other people. Translated into our language of peace workers, according to this group of scientists

- heart coherence as a factor of peace is influenced by our thoughts and emotions:


⁵ During my seminar in Cyprus I also spoke of verbal violence, with special reference of the way some pacifists choose to express their thoughts and feelings. Here I prefer to limit my analysis to the latter ones, as being at the root of the former one.

positive, loving thoughts and emotions bring coherence

negative, non-loving thoughts (including any form of negative judgments) and emotions destroy the coherence and bring disorder, first in our physical bodies, then in the magnetic fields around us

the influence on the magnetic fields grows when the number of people increases

A huge number of people feeling the same at the same time can have a strong influence on the magnetic field on a planetary level.

Gregg Braden, a well known researcher and popularizer with a strong scientific background explains this with reference to the measured alteration of the magnetic fields of the Earth shortly after the first stroke against the Twin Towers on September 11th, 2001, when the news reached the whole world population:

“At that time, the USA had two satellites called GEOS (Geosynchrone Environmental Satellites), one positioned in the northern hemisphere, one positioned in the southern hemisphere. The role of these satellites is to measure the magnetic fields of the Earth and send back readings every thirty minutes. These readings normally were within a certain range that the scientists were relatively used to see. Now, it was on September 2001 that scientists began to see some readings that were just off the scale, compared to what they had seen in the past. And they said: ‘What’s happening, what is it that could be influencing the magnetic fields of the entire planet to such an extent, that we see our satellites sending back these big spikes we had never seen before?’ They related the data of the satellites on a calendar with days and months and they found that the spikes occurred precisely during the time of September 11th, 2001, and even more precisely, that the first spike occurred 15 minutes after the first plane hit the first tower in the World Trade Center.”

But listen even more attentively to the commentary of Gregg Braden, reversing the currently dominant scientific view:

“The reason why this [the above readings of the two satellites, FP] is so important for our scientist is because during 300 years our science has been based on two false assumptions: 1) that everything is

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7 For the vital role of the magnetic fields see the explanation of the European Space Agency in http://www.esa.int/Science_Exploration/Human_and_Robotic_Exploration/Lessons_online/The_effects_of_magnetic_fields - last visited on November 27th, 2019.
8 https://www.youtube.com/watch?v=q7tYyyeET0w - last visited on November 29th, 2019.
separated from everything else, that what happens on one place has no effect on what happens anywhere else\(^9\) and if it looks like it does, it is only a coincidence; 2) that our inner experience: thoughts, emotions and beliefs, have no effect on the world beyond our bodies […]. [However, when the scientists] looked at the magnetic fields of the Earth spiking precisely at the moment the human emotion of the planet is focused on a disaster, […] this lead to a series of studies showing that when a certain number of people come together and they choose a moment of time to create a precise emotion in their hearts, that emotion literally can intentionally influence the very fields sustaining life on planet Earth. These fields are implicated in everything, from immune response in humans, climate, weather patterns, cycles of war and peace, our abilities to solve problems […] All these, as different as they might look, are related to the magnetic fields of Earth\(^10\).

The Global Coherence Initiative

Based on this, the Heartmath Institute is currently monitoring the effects of their Global Coherence Initiative, a synchronic meditation of volunteers all over the world. The Heartmath Institute describe it as follows:

“The Global Coherence Initiative is an international effort that seeks to help activate the heart of humanity and promote peace, harmony and a shift in global consciousness. GCI conducts groundbreaking research on the interconnection between humanity and Earth’s magnetic fields and energetic systems."\(^{11}\)

The Maharishi effect

The Global Coherence Initiative is in fact the 21\(^{st}\) century version of the Maharishi Effect. Starting from the 1980s, the so-called Maharishi Effect showed that it is possible to enormously reduce violence in an area, if so little as the square root of 1\% of the population practice Transcendental Meditation. Such a practice by a small percentage of people positively influences the magnetic fields of the Earth.

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\(^9\) To my poor scientific knowledge – I refer to the so-called butterfly effect – this might not be completely true, but Braden clearly speaks of the general fragmentary approach of Western science, as opposed to an holistic vision of the world.

\(^{10}\) See note 8.

\(^{11}\) [https://www.heartmath.org/gci/](https://www.heartmath.org/gci/) - last visited on November 29th, 2019.
This apparently bizarre idea of “The fool on the hill”12 has been confirmed by a number of scientific studies13. David Orme-Johnson so explains the phenomenon:

“Just as modern physics has recently postulated that nature is fundamentally composed of quantum fields that mediate action at a distance, Maharishi Mahesh Yogi has postulated that there is a fundamental level of consciousness, transcendental consciousness, at the basis of each individual’s mind. A direct experience of transcendental consciousness is an experience of the unified field of nature’s intelligence.”14

Therefore, there is I believe enough ground on which to base

**Statement No. 3:** We as human beings are well equipped to generate states of peace or war simply through our thoughts and emotions.

**The need of opening our minds to another worldview**

To quote a Yogi is not the best way to convince western readers. We usually refrain from grounding our beliefs on utterances based on a different worldview as ours.

But there are exceptions. One of these is Mind and Life15, an ongoing conversation of Western scientists with the Dalai Lama, with the goal of “Bridging science and contemplative wisdom to illuminate our shared humanity and inspire action16.”

Buddhism has been exploring human consciousness for over 2000 years. The West cannot claim such an experience. We still have to find a satisfactory definition of “consciousness”. It is a little more of 100 years since we started to scientifically investigate our psyche. But our psyche is not consciousness, whatever this last might be.

As it seems, we have to do with two elements we have never really counted with in western Sociology17: energy and consciousness – our thoughts and feelings as energy, with a mysterious consciousness as postulated background. The combined action of both elements is now said

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12 It seems that this famous song of the Beatles was inspired by the visit they paid in the 1960s to Maharishi Mahesh Yogi in India.
13 [https://research.mum.edu/maharishi-effect/](https://research.mum.edu/maharishi-effect/) - last visited on November 29th, 2019.
14 David Orme-Johnson, Theory and research on conflict resolution through the Maharishi effect, ibidem.
16 Ibidem.
17 Sociology is the academic branch in which Peace Research falls.
to have visible effects on human life and relationships. Energy and consciousness, instead of matter. Never heard of it?

**Planck and Einstein jump in**

Yes, we heard of it, particularly in the first half of the 20th century. Let us read from the text of the lecture given by Max Planck, 1918 Nobel Prize for Physics, in Florence in 1944 (underlining and commentary between [ ] are obviously mine, FP):

“As a man who has devoted his whole life to the most clear-headed science, to the study of matter, I can tell you as a result of my research about the atoms this much: There is no matter as such! All matter originates and exists only by virtue of a force which brings the particles of an atom to vibration and holds this most minute solar system of the atom together [...]. We must assume behind this force the existence of a conscious and intelligent Geist [this word means both “Mind” and “Spirit”]. This Geist is the primordial fundament (Urgrund) of all matter.”

Please notice: 1) Planck denies the existence of matter as such; 2) he affirms the existence of a force, t. i. of an energy, as the cause of matter; 3) behind matter and the force that give birth to it, he assumes the existence of a consciousness.

Not less evident is the primary role of energy and the only derivative one of matter in Einstein’s famous equation:

$$E = mc^2$$

where $E$ is energy, $m$ mass, that is matter, and $c^2$ the square of the speed of light. The same equation becomes:

$$E/c^2 = m$$

where it is evident that $m$, matter, is but energy speeded down. Therefore, again, energy is the matrix of matter – without energy, there is no matter.

**Beyond a matter-based peace work**

What has all this with peace work to do? If we consider work on the outer world as the core of any activity in favour of peace, we miss the causative dimensions behind the curtain: energy and the – for us actually very

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18 Archiv zur Geschichte der Max-Planck-Gesellschaft, Abt. Va, Rep. 11 Planck, Nr. 1797.

19 This formula was first published in A. Einstein, „Ist die Trägheit eines Körpers von seinem Energieinhalt abhängig?“ in Annalen der Physik, vol. 18, 1905, p. 639-641
mysterious – intelligence assumed to drive it, to drive the force that generates matter and, within matter, facts.

The hypothesis that deserves to be developed, the chain consciousness/intelligence-energy-matter/facts is obviously of no easy investigation. Most of all, we have no idea, nor will possibly ever be able to somehow encompass the assumed intelligence as the matrix of energy. On the other hand, knowing the only relative existence of matter, to look at facts as given matter, and not at ourselves as generating, through the influence on the magnetic fields of our surroundings, peaceful or conflictive situations, is to ignore that a comedy, or a tragedy, is made by the actors and not by the stage. Gandhi seemed to know this: he wanted good actors and cared less about the scene, because he was confident that the players would finally draw the whole picture.

We have now landed to

**Statement No. 4: Energy and consciousness claim their place within Peace Research and Peace Education**

**One more physicist: Hans-Peter Dürr**

Hans-Peter Dürr (1929-2014) was a remarkable quantum physicist, a close collaborator of Werner Heisenberg. He was granted the Alternative Nobel Prize in 1987 and in 1995 he was one of the members of the Pugwash group that received the Nobel Prize for Peace. In his *Potsdam Denkschrift* 2005\(^2\) he explains the copernican revolution brought about by quantum physics (again the underlining is mine, FP):

> “The dualism between matter and mind is […] rendered obsolete. The alternative in the 19th century was between a “positivistic explanation of nature” and a “Christian Creator-God and world ruler”. In both systems, humankind was contrasted with nature, which he could and was permitted to subjugate, whether justified by divine destiny or by evolutionary superiority. We leave this false alternative behind us, clearly also in the sense of the new access to a consciousness of omni-connectedness, a consciousness that the natural sciences open up for a non-dualistic view of the world. This makes it possible to recognize humanity in fundamental commonality with the rest of nature, without thereby falling into a conventional naturalism or simply invoking


cosmologies that may have corresponded with the worldviews and ways of life of cultures that remain close to nature.”

A new paradigm in peace research and peace education

Let us come to a synthesis of all the above:

- great physicists inform us that matter is not existing *per se* but it is the direct product of energy, with a conscious mind beyond it;
- they add that everything is interconnected with everything else;
- cutting-edge science shows that we are able to influence the world of matter with our thoughts and feelings.

We are now in a position to interpret Gandhi’s invitation to transform ourselves in the light of science, coming so to

**Statement No. 5:** Transforming ourselves means rising our consciousness to the point from which we clearly see that matter is relatively non-existent and that we can act upon it.

Let me say this in other words, hoping to be clear: the world of matter is the world of duality and division. Where there is division, peace is impossible; we can do our best with better laws, declaring war a crime, prohibiting the use of arms, feeding all the children and the poor of the world, but even if we succeed in this, conflicts and violence, as caused by the idea of separation, are built-in in matter and will come up again and again. The struggle for peace is a lost one, where division is intrinsic.

We cannot escape the world of matter, but we can rise our awareness above it, and even beyond the level of energy. The more we approach the dimension of non-dualism, of the conscious, intelligent mind, the more we see a totally different panorama, we see solutions, alternatives, effective ways of conveying ideas. Most of all, we so deeply feel the absurdity of violence, that our words and actions get a force unknown and their magnetic emanation begins to change the world.

This is not a dream of an old, desperate pacifist, this is science, yes, it is science, I repeat: it is science! If you are not yet convinced, then read again and again these few pages.

**Practical ways for rising our consciousness above the world of division and violence to the level of oneness**

Being intellectually convinced, however, is not enough. An intellectual realization is only the first step. Our senses, our habits, our subconscious beliefs stick to the material reality. Transforming ourselves is a hard, very hard

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22 Ibidem, p. 6.
job, but it becomes more and more evident – for the ones ready and willing to see - it is a necessary one.

Age old technologies, like yoga, Buddhist meditation, Christian contemplation and many others have exactly this goal, to substitute reality with Reality, in order to act upon the material world from that vantage point.

As a matter of fact, however, not everyone feels attracted by such practices. We have, anyway, the freedom of choosing other paths, or developing our own path, our own training.

The turning point will be reached when we, independently from the way we choose, realize - and are therefore able to transmit to others – that, as the great Dürr says:

“… omni-connectedness, which we can call love and which germinates from vitality, is inherent in the core of us and of everything else.”

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23 Ibidem, p. 17.