



Beyond the AI Conundrum: The Future of Intelligence Lies in its Social Flourishing

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Abstract

Speculations proliferate on the possibilities and impact of Artificial Intelligence (AI), in particular of the so-called "Superintelligence", which is pictured as a promising challenge by some and a terrible threat by others. In order to navigate these discussions without getting lost in the complexities and uncertainties of AI we need to go back to their original simplicity, their starting point. That is, the fact that technosciences are all based on a fundamental creative power we all share: human intelligence. In this article, I thus propose a cultural and humanistic approach to intelligence. I posit that the challenge of intelligence today does not lie in its artificial development, but in its social embodiment and flourishing. The deterioration of human intelligence is the prospect that should frighten us, not the rise of 'super-intelligent' machines. It is our contention that computers do not understand anything: AI systems only compute. We should design and use AI systems so they contribute to the development of the socially embodied human intelligence on which human fulfilment depends. My primary aim is to highlight the need for humanity to live from a state of healthy, mature and harmonious creative intelligence. I believe that this is the key to truly democratic nonviolent societies, which I refer to as creative democracies. Creative democracies are the social embodiment of creative intelligence. A well-developed and mature creative intelligence constitutes the basic power of the people.

Keywords: Superintelligence; Technosciences; Humanistic; Intelligence

The Ways of Intelligence

Debates and predictions abound on the future, capabilities and social impact of the technosciences (the interaction between science, technology and economy, which encompasses the myriad products and services taking over our daily lives). Speculations proliferate on the possibilities and impact of Artificial Intelligence (AI), in particular of the so-called "Superintelligence", which is pictured as a

promising challenge by some and a terrible threat by others. In order to navigate these discussions without getting lost in the complexities and uncertainties of AI and other technosciences such as biotechnology, we need to go back to their original simplicity, their starting point. That is, the fact that technosciences are all based on a fundamental creative power we all share: human intelligence, in other words, what makes us human. It is a collective intelligence

- communicative and symbiotic - whose growth and decline depends mainly on cultural factors. Unlike most animals, our biology is insufficient for survival. Instead, we inherit from birth a communicative and symbiotic or cultural intelligence to develop by learning and creating nearly everything we need to live. In this article, I thus propose a cultural and humanistic approach to intelligence. I posit that the challenge of intelligence today does not lie in its artificial development, but in its social embodiment and flourishing.

My primary aim is to highlight the need for humanity to live from a state of healthy, mature and harmonious creative intelligence. I believe that this is the key to truly democratic nonviolent societies, which I refer to as creative democracies. Creative democracies are the social embodiment of creative intelligence. A well-developed and mature creative intelligence constitutes the basic power of the people. Due to the complexity of our dynamic societies, élites are powerless to face ever-changing challenges. For the first time in history, it becomes clear that only creative democracies can face the survival and wellbeing of life on earth. The future history will be the history of creative democracies or it will not be. In order to guide technoscientific growth and its accelerating rhythm, we cannot only rely on past-accumulated experience and reasoning. The creation of meaning by means of narratives, humanistic ideologies, fixed ethical values, plans, norms, laws, rights and duties – i.e. what has guided action in the past – may still be necessary but is insufficient to face such continuous transformation.

What to do? We have to continually recreate meaning, i.e. what are the needs and what is important for our society. This is the main task of collective free creative intelligence, which is not attached to past patterns of thought but is instead always fresh; it acts in the present, and deploys spontaneous creativity to face the unknown, never delaying the confrontation of new challenges. That is why it is so important to understand the ways of creative intelligence, the true power that we, as humans, have from birth. However, cultivating this intelligence requires a minimum of decent living conditions for all - with social justice to break away from the vicious circle of economic and intellectual poverty - as well as a permanent access to education. To this I turn in this paper. However, before fleshing out this proposal, a brief warning. When we try to talk about the original simplicity and creativity of intelligence, words always let us down. They are merely symbols - pointers that can only hope to stimulate our attention and interest, provoke further research and move us towards insight. And what is insight? Direct perception of the facts - and the spontaneous realisations to which such perception can give rise. These pages aspire to awaken the insight that cultivating creative collective human intelligence needs to be the centrepiece of our societies.

The Degradation of Human Intelligence and its Dangers

When I started teaching Artificial Intelligence (AI) at mid-80s, this whole new field of study was buoyed up by an atmosphere of great confidence and excitement. Wild claims generating hype in order to either impress potential investors or sell products for the highest profit possible were flying left and right. So much so that I was alarmed to see how our future was being sold – it was one full of intelligent machines, including human ones with brains, the so-called meat machines. If what was predicted were to come about, humanity as a whole would end up being enslaved by those who possessed these intelligent machines. Behind it all there was, and still is, an ignorance of the depth and unity of human intelligence. Thus, besides my work on artificial intelligence, I felt the need to understand human intelligence, with its sensitive and meaningful perception of reality as a whole, so necessary in the globalized world in which we now live. I began to consider “artificial intelligence” as a metaphor for a restricted instrumental form of functional intelligence, that is, as computational intelligence inspired in human intelligence and at the service of it. Once an observed intelligent behaviour has been precisely understood and dissected, such as reasoning or learning, an artificial intelligence researcher can attempt to develop algorithms to imitate it. This is a possibility worth exploiting and researching thoroughly to extend its ability in a form of beneficial symbiosis with human intelligence. However, we should be aware that human intelligence is so much more than computation of various sorts of intelligent behaviours and knowledge in any automaton. It is more than accumulated emotions, experiences and knowledge, and the resulting thoughts, which are limited, sparse and often egocentric and conflicting. Thus, I had the insight that the great danger does not lie in intelligent machines, despite what so many dystopian films suggest (e.g. *The Matrix*), but rather the immaturity, short-sightedness and possible degradation of human intelligence, what I later call programmed intelligence, and an inability to cope with the enormous power placed in our hands by the technosciences, and in particular artificial intelligence.

A Personal Discovery of Freedom

My awareness of this danger led me to revisit – and deepen - an intuition from my adolescence. Back then I had been struck by the statement of the Catalan priest and philosopher Jaume Balnes, in his book *El Criterio*, that “truth is reality”. As I continued to scratch away at the surface of things, I realised gradually that people and institutions have always tried to seize ‘truth’ in order to influence – even dominate – others. I could not accept that reality could be subjugated by any power. Thus, I came to understand, as a

wonderful gift, that reality could not be anything other than pure freedom. It was an insight into the fact that reality cannot be encompassed or determined by any form of knowledge, theory or model. Reality never repeats itself completely, always surprises us with its ceaseless advance towards novelty. In reality, nothing can be completely predetermined. Scientific knowledge is about reality, it is a high quality model of reality; it is neither reality itself nor is the unique form of intelligence. Freedom is alien to scientific method. When science meets freedom, it calls it randomness or chance. For instance, the choice between quantum states, when made by an electron, we call chance, not recognising the freedom of the electron (for scientists it would be awfully naïve to use that expression). Nevertheless, freedom is present in the creative origin and in all of reality; even in the models we create about reality mainly through language, such as space, time, matter, atoms, etc. For example, the theory of evolution cannot guarantee, that if we were to go back in time, or to an identical parallel universe, the Sapiens species would appear on earth. Sapiens have always been, and still are, a wonderful continuous creation of this precise freedom of reality, which is the source of human freedom. Because of it, we can be flexible, efficient and creative embracing our needs and interests; aware but not submissive to the power of domination, to desires, expectations and fears, and so free of the suffering this submission produces. It is usual to believe that reality imposes itself upon us, but it is different. It is the models of reality we create that impose upon us, that bind us. True reality sets us selfless and free. This freedom of all reality – of which we are reminded by its formidable resistance to any attempt to fully grasp it, control it, or define it – is a fundamental fact that can only be discovered and lived as a direct perception. “Freedom of reality” is a powerful symbol pointing towards reality itself, towards its mystery. In a world that has no choice but to live from and rely on creativity, freedom becomes a necessity. The freedom of reality is, therefore, the most powerful and inspiring symbol for creative democracies.

The Necessary Mutation of the Species and its Culture

This freedom can only be fulfilled and enjoyed through the creativity of intelligence, a quality and energy that it is impossible to possess or subdue. Only creativity can realise this freedom. Only freedom carries the truth. Thought, always conditioned, can never be free and so is incapable of establishing what truth is. True intelligence is the agency of this selfless love and freedom. Nothing can touch or kill that freedom. Later I confirmed this discovery of freedom of reality by the study of the great heritages of human intelligence and wisdom such as the Upanishads, the Tao, Buddhist sutras, Christian gospel, etc. containing necessary teachings for the modern world. (E.g. Meister Eckhart praying God to free him

from God in order to reach the full truth, or the Zen Buddhist Koan telling that if you meet the Buddha, kill him, because in fact it is a fabrication of the mind). Putting this totally free and creative intelligence at the centre of human life, instead of the knowledge and thoughts so often used to dominate others, is what I describe as the necessary mutation of the decrepit, arrogant and insatiable predator Homo Sapiens into the humble lover Homo Quaerens. This latter is the result of an essential evolutionary process, a being who questions in order to investigate and create, to enjoy, and be of service to, humanity and life. (This is the vision set out in the homoquaerens.info blog.) This personal discovery of freedom and intelligence led me to deepen my studies into it. Not to make a model of it but simply to help awakening it. Aware that creative intelligence being primordial and free, no one can describe it. It is a living thing, moving, active.

The Unity, Totality and Creativity of Intelligence

The creative agency of reality itself

Attributing intelligence exclusively to humanity and to particular individuals (nearly always a minority of ruling males) has had terrible consequences throughout the history of humankind. It has given rise to slavery, the belittling of women and their subjection to men, the mistreatment of animals, which have routinely considered to be stupid – in short, to all kinds of violence. The concept of ‘individual intelligence’ has survived intact up to the present day. This misunderstanding of intelligence has continued to underpin societies that have grown from absolutist states and are still organised around domination and exploitation. However, intelligence is not exclusive to humanity, but is the activity of reality itself; it is its creative agent. It follows that the intelligence of reality is one and the same, always operative throughout the universe. Unity, interactivity, freedom and creativity are the general hallmarks of intelligence and his energy at its best is unconditional love. Therefore, intelligence is free of any definition; it reveals itself in its creations not to be confused with it. Primary concern with intelligence and its unity rather than knowledge and its divisions, imposes nothing on people, rather makes them free and creative, open to concord and peace rather than discord and violence. Moreover, when seen from the perspective of accumulated experience, theories, knowledge and thought, the world appears to be plural and extremely complex. When changing perspective by focussing attention on the source and foundation of culture - the creative intelligence and its healthy development - then this enormous complexity disappears and the unity and simplicity of intelligence allows a new comprehensive view on reality. For instance, just looking at the interest, one of the powers of intelligence presented latter, much of the complex behaviour of individuals and

collectives can be understood. The different forms of intelligence in plants, animals and humans are distinctions of the mind, created by speech and thought. Among these various intelligences, human intelligence stands out, and it is on this that I want to focus.

Constructing reality in terms of separateness and individuation - in particular, attributing intelligence to individuals - is characteristic of a particular kind of intelligence. It is one based on the needs or thoughts of the separate psyche, which in its search for security creates a reference centre: the individual with its needs and interests of the 'I', the 'me', which must be satisfied. If I reject that 'me', I am lost! (The proposed creation of trans-human individuals, i.e. cyborgs, is another example of a prevailing and dangerous individualism; it separates off those who can pay as being superior. Another result of this misleading individualism is to consider death rather than suffering as the first big problem of humankind, leading to the search for individual biological enhancement until reaching immortality, rather than collective peace and joy. In opposition to this, we must understand human intelligence not as an individualized entity, but as a collective phenomenon that is being constituted through intra-actions with other forms of existence within the unity of cosmic intelligence. (I define intra-actions as primordial interactions constitutive of each existence, to distinguish them from external interactions between already constituted existences). To understand the evolution of human intelligence and AI, one must investigate the intra-action of both. It does not make much sense to talk about AI as a neutral tool independent of human intelligence. Thus, in order to direct the intra-action Human-Artificial Intelligence towards the common good and to avoid its dangers, it must be understood by starting with the human intelligence that creates the artificial one.

Two Levels of Intelligence

I propose to distinguish two levels, or strands, of human intelligence; two forms of intelligence rooted in one reality. On one hand, the intelligence of need, this is a survival intelligence of needy subjects, which perceives reality as something in front of us, a separate world of objects understood only in relation to our needs and interests, our senses and capabilities. That is, the intelligence of utility, of birth and death, of hunger and thirst, of pleasure and pain, of means and ends, of space and time, of becoming, of evolution, of cause and effect. Always pursuing objectives, this intelligence creates models of reality that are comprehensive and powerful. Good examples of such models are those created within the technosciences. They are so necessary for survival, comprehensive and powerful that we tend to confuse them with reality itself. However, they are still models, just like the one that the tick creates, with its

two senses that lock onto the heat and sweat of mammals in order to parasitize them.

Besides and inseparable from this intelligence of need is liberating intelligence. This connects us directly with reality, without any mediation and without division. In this way a flower is enjoyed without any interposing thoughts, with no sense of separation from it, without identifying the 'me' and the 'it'. It is a timeless, subtle and deep level, not dependent on any cognitive model. This is silent contact with the origin: the source of creative freedom. Within this connection, human intelligence finds freedom, loving energy, peace and the unconditional enjoyment of life. Although too often unconscious or half-asleep, this form of intelligence is always operative. It can surprise us with a eureka! while we are taking a bath. Unlike the intelligence of need, liberating intelligence has nothing to achieve, yet it makes it possible, on the one hand, changing our focus of attention: from attention to contents such as experience, knowledge and thought, to attention toward their source, the creative intelligence and its healthy development. On the other hand, to detach from the models created by the intelligence of need, in particular from the models that we create about ourselves. It infuses freedom and quality to the intelligence of need, and curbs its tendency towards domination and violence. In this way, liberating intelligence also allows the evolution of the intelligence of need by giving it the creative freedom necessary to expand and create new models of reality, opening up new possibilities for human life, for better or for worse. This has led to the development of different fields of intelligence, such as the fine arts and the technosciences. Liberating intelligence is not an intelligence of thought like the intelligence of need; thought may mislead or be an impediment. The intelligence of need should be active only when required, rather than dominating the mind, impeding the quietness needed for liberating intelligence to operate. That is one of the most important challenges of humanity, on which depends our survival.

The Creative Hand

To look at this in more detail I will focus on five powers of human intelligence that I call Constitutive Creative Capacities (CCC). These five powers are: interest in reality; semiotic communication; subsidiary symbiosis; generalized research and liberation. I identify these CCCs with the five fingers of the creative hand, the hand that makes us human. Understanding it fully is the simpler way to understand humankind's past, present and future. Enhancing them is the democratic enhancement of society, more just and secure than the individualistic biological enhancements proposed by transhumanism and posthumanism. I want to describe the unity of this hand briefly.

Interest in reality: Interest is the vector energy of human intelligence. I represent it with the index finger, the finger of attention, the one that points to the important things that motivate and guide action. Interest makes human intelligence a sensitive, emotional and evaluative intelligence. Only two facts have to be considered to emphasise its importance. First, when interest points to the individual or collective ego, instead of pointing to reality, it perverts the rest of the CCCs, generating a society of domination and exploitation. Second, interest changed direction during the European Renaissance and stopped pointing to the past in order to repeat it; instead it pointed towards the future to create it. Then began the second great cultural mutation of humanity: our leaving behind of the agricultural era. That is the mutation of Sapiens into Quaerens; a necessary mutation if we do not want to reach a grim end.

Semiotic communication: Its primary manifestation is speech based on articulated sounds that convey meanings about a referent, present or not - the sign. I represent it with the middle finger, the mediator, the axis of the creative hand. Speech frees us from the basic stimulus-response mechanism of animal life. Between stimulus and response we interpose speech with its richness of meanings. This is the most wonderful of the powers of human intelligence, opening up the limitless field of human imagination. It is mainly creative and metaphorical; in fact, it creates metaphors continually: it relates expressions of meaning to the experience of one domain and then translates them to other domains, thus showing the unity of intelligence. So we can say that human intelligence is mainly linguistic, as are the models it creates, among them AI, which differentiates both human intelligence and AI from pure animal intelligence. Everything that affects communication transforms human life. Therefore, there is an urgent need for us to thoroughly investigate the current impact of information and communication technologies on human communication.

Subsidiary symbiosis: This is the fundamental and common capacity of life (including the whole of the earth) - a capacity for co-operation and mutual service, which I represent with the ring finger. The fulfilment of the aspiration to happiness is a collective endeavour, not an individual one, as for example proclaims the Constitution of the United States. I call it subsidiary symbiosis to emphasise that it can no longer be hierarchical as in the pre-industrial past. Creativity requires that each human organization has the maximum autonomy that it can exercise responsibly in intra-dependence with other institutions, from the individual to the UN. The individualistic understanding of intelligence - so widely disseminated and adopted - is misleading; intelligence is in constant operation in all of the intra-actions. Divisive individualism, the individual as a self-interested and self-concerned atom of society, is the perversion of symbiosis

that modernity has promoted - mainly through the state and market - after confusing it with the necessary autonomy of the individual as constitutive of a healthy and efficient symbiosis. Without communication and co-operation there cannot be true intelligence. Furthermore, a supposed individual super-intelligence without a thorough capacity for symbiosis would become a monster like Frankenstein's. This could well occur with the promised singularity of super-intelligent machines.

Generalized research: This is the hallmark of Homo Quaerens. I represent it with the little finger because it was the last of the capacities, growing systematically from the Renaissance onwards, although it is still restricted to certain specialties, particularly technoscientific ones. Questioning what is known in order to reach a state of continuous learning and understanding, opening up to the unknown in order to create, is the proper dynamic of intelligence, which permanent education should enforce. Creative learning is this constant movement of research from the known to the new unknown without accumulating, but keeping intelligence fresh. At our present moment, this attitude of constant research is not only necessary in certain specialties, but in all activities - and by all - if we do not want to end up displaced by machines more powerful than ourselves when it comes to simply using knowledge, including languages.

The capacity for liberation: This is the central capacity of what I have previously called liberating intelligence. With the understanding that to liberate does not mean to deny but to not be in a state of submission. I represent it with the thumb that the Romans used as a sign of life or death at the end of gladiatorial combat. But now it functions for all of humanity. It is the ability to end all submission, internal or external. Liberation from that which is internal or relative to the ego, constituted by desires, expectations and fears, but also liberation from one's attachment to emotions, knowledge and thoughts. It allows us to free ourselves from external submission to the mechanisms of domination which are prevalent in today's exploitative societies. Liberation is the hygiene of the mind liberating it from the accumulated past, the 'me', meeting everything anew, from one moment to the next. Mental hygiene needed for personal and social health as much as corporal hygiene was in the past. The corporal plagues of the past are replaced by the mental plagues of the present.

Intra-dependency of the CCCs: We cannot understand or properly exercise any CCCs without being mindful of their intra-dependency - the contribution of the other CCCs to each of them. A brief examination of this underlines the point. Without interest, the other CCCs would not have the energy to act. And without the proper functioning of the rest of the CCCs, especially research and liberation, interest is

reduced to animal instincts - desires, expectations and fears. It is not directed towards reality but towards the ego. Then it becomes short-sighted and selfish, corrupting the rest of CCCs. Under such circumstances, communication cannot be sincere, symbiosis becomes domination, research is placed at the service of the highest bidder and 'liberation' makes us insatiable. Genuine symbiosis is based on common interest and on trusting communication. It can be present, for instance, between nations, manifesting at a level quite unattainable for other animals. Symbiosis and communication go together; without authentic symbiosis there is no true communication. Common interest, communication, symbiosis and liberation from individualistic selfishness make possible both the faculty of investigation and the team creativity to which it gives rise. This we should value above individual creativity and research in a world as complex, uncertain and changing as our own, in which the individual becomes increasingly disempowered. Research has to be directed by a strong interest in reality, compassion and love instead of mere curiosity. Work undertaken without this spirit is easily placed at the service of plutocracy and imperialism, as the history of the technosciences shows. Curiosity can cure cancer as well as making the atomic bomb; it can go to the Moon and leave malaria research in second place. In summarizing this interdependency of the CCCs it is vital to stress the importance of the capacity for liberation - the grip of the creative hand - which allows all the other fingers to work to their greatest potential. In this way, interest can reach its highest degree - unconditional compassion and love; communication can be sincere and trusting to the point of silent communion; subsidiary symbiosis becomes unity in love and service; research reaches the highest degree of team creativity and is undertaken for the good of all humanity.

How to Live Exercising free and Creative Intelligence

Three uses of Human Intelligence

Now I want to look at the two levels of human intelligence described above (the intelligence of need, and the intelligence of liberation) from the perspective of the CCCs. Depending on how the CCCs are exercised (that is, on the degree of intensity and the priority of each CCC over the others) we will see different uses of a single human intelligence. I would like to highlight three specific uses of human intelligence. The first two are well-differentiated uses of the intelligence of need, which I call the functional and the evaluative use. The third is liberating intelligence, the deepest level of human intelligence.

Functional intelligence: Interest takes the form of curiosity about the functioning of the world in order to predict and control phenomena; communication creates a functional-mathematical meta-language based upon measurements,

magnitudes and calculations; symbiosis is simply collaboration; research is highly specialized and methodical; liberation allows the abstraction of qualities and values that could hinder interest in the functioning of things. This is what I call functional intelligence - the type of intelligence characteristic of technosciences. This creative functional intelligence is a wonderful and powerful achievement of humanity. Due to its enormous success, it is currently the most developed form of intelligence and it creates machines in order to extend its reach. However, the things abstracted such as values do not disappear, they are still there, so, no matter how developed and useful functional intelligence is, it lacks sensitivity (being abstract) and without the other forms of intelligence, is not enough for a meaningful life

Axiological intelligence: We exercise axiological intelligence when our interest is primarily sensitive, artistic and evaluative; communication creates the stories that motivate and guide action; symbiosis, social cohesion, a sense of being part of a team, all become central; research is mainly sensitive, artistic and valorising, oriented to self-knowledge; liberation frees us from established values, enabling the creation of fresh values to deal with the new needs arising from technoscientific growth. For instance, a much-needed task of axiological intelligence is to decide about artificial intelligence, about what it is right to automate and what not to, rather than leaving the decision to functional intelligence, which is mainly concerned about efficiency and dominated today by economic considerations.

Axiological intelligence is an intelligence of the contrasts through which our senses operate (e.g. light vs darkness), in particular the contrasts between values and counter-values (e.g. good and bad). Primordially, it spontaneously senses what is bad for us (e.g. danger), and propels us to what we sense to be good (e.g. safety). Furthermore, it shows us that often the best way to attain a value (e.g. attention) is to confront its counter-value (e.g. distraction), which includes addressing its nature and tricks (e.g. indolence, negligence and self-concern). The same could be said about selfishness or violence as counter-values. That is, inquiring in order to be fully aware of the counter-value, we can free ourselves from it and so see the true value spontaneously (e.g. by inquiring and confronting falsity we open ourselves to truth). By becoming fully aware of the counter-value, we come to the value without any imposition. Moreover, this is done not individualistically but in integral symbiosis by exerting all the CCC.

Functional and axiological intelligence cover the two clearest needs of human intelligence: the functioning and the evaluation of things, the two main modes of the intelligence of need. They create models of reality such as technosciences and value systems.

The intelligence of liberation is the most profound level of human intelligence, centred on the capacity for freedom, always operative for good and for bad, love or insatiable greed, the latter when it goes unnoticed or left ignored. Liberating intelligence allows us to exercise the CCC's flexibly, freeing us from established models of reality, allowing us to avoid becoming programmed intelligences (see below). Above all, liberating intelligence puts us in direct contact with the source, with reality's creative freedom and with the unity, depth, totality and simplicity of its intelligence. The achievement of integral and peaceful symbiosis among people and with the earth cannot be found in knowledge and thought, and neither a "theory of everything" integrating the diversity of methods and knowledge. These are divisive means and tools of intelligence, always fragmented. The harmony resides in the unity and clarity of intelligence, specially liberating intelligence, the silence of the ego, individual and collective, the end of fear and violence resulting from division.

The Discord between the Three Dimensions of Intelligence

Everything, even the unknown, can be approached from the three dimensions of intelligence — functional, axiological or liberating. Due to the unity of intelligence, in whatever form of intelligence the other two are operating. There are disciplines such as Medicine where the need to recognize the interplay among these three dimensions is particularly obvious. A good Doctor needs to integrate technoscientific expertise, sensibility to the values and needs of the patient, and detachment from self-interest (such as economic gain) to focus on healing. Lamentably humanity has not yet been able to live fully, exercising free and creative human intelligence where functional, axiological and liberating intelligence are in harmony. On the contrary, the discord between them was greatly accentuated by the second cultural mutation of humanity mentioned above. The exponential growth of the technosciences, with the enormous social impact of their products and services, has not been accompanied by an equivalent growth of new models of axiological intelligence, nor of growth in the practice of liberating intelligence. The religious traditions have not seen the need (or the opportunity) to encourage the growth of axiological and liberating intelligence within the technosciences as they expand their influence. Such a growth is essential in order to place them at the service of all humanity.

The social poverty of both axiological and liberating intelligence has an inevitable consequence: the immaturity, even the degradation of human intelligence. Witness the fact that war is the biggest world industry, while the production of propaganda is the second. This degradation results from the progressive decrease, from birth, of the potential

for freedom and creativity within human intelligence - a consequence of the pressures inherent in a society of domination and exploitation. A further result is that the intelligence of the social majority, instead of investigating the direct perception of dynamic facts, which is the proper activity of intelligence, becomes mechanical thinking. This mechanical thought revolves around memory, accumulated experiences and knowledge, all of which are often in conflict and even contradictory to each other. This kind of thought is mainly driven by desires, expectations and fears. Instead of perceiving current reality and the newness it brings, it projects the past onto the future. As a result, it is very easily manipulated by the powers of domination. True democracy, based on the freedom and creativity of the social majority, becomes impossible.

None of this is new in the history of humankind. But now this domination becomes more realizable, more efficient, more subtle and more dangerously destructive than ever. For example, dictatorships such as China are using Big Data and other AI technologies to directly control citizens. In the West, these methods of domination are also practised, but in a more indirect and subtle way by predicting and manipulating people behaviour through platforms such as Google. So, we have not only been content to become programmed intelligences (intelligences attached to the models of reality controlled by the dominating power), but AI has created programmed intelligences that are increasingly powerful and autonomous. The reaction to these identified dangers has been to focus attention on what AI should be like, instead of focusing upon the human intelligence that creates that AI. It looks for an AI that obeys a specific ethical code and seeks to make it more robust, reliable and safe. As if there were not already enough cases of similar diagnoses and remedies applied to much simpler problems with no useful results. For example, the model we have created for transportation is not only unsustainable but also causes more deaths each year than all current wars put together. The problem lies in the immaturity of human intelligence, particularly the intra-action of human intelligence with an AI that seeks to become more and more autonomous and powerful. So we can say that, no matter how far-reaching or efficient might be the expertise of programmed and artificial intelligences based on data processing (including learning and ethical expertise), this will not make them intelligent. In order to become intelligent, this expertise, or ability to achieve complex goals, must be well integrated in the collective intelligence and must be based upon all the CCC's in harmonious intra-action.

Brief Conclusion

The conclusion is quite clear: we must promote the full awakening and flourishing of intelligence in all of humanity and remove the obstacles, such as hardship, that get in the

way of this essential development. Only a free and balanced intelligence allows us to live in reality, rather than existing in an ideal and conceptual world with its hypocrisies and deceptions. The main aim of information-processing, in particular AI, should be to contribute to this general growth of human intelligence. It should also recognise that this is a form of intelligence which is in unity with cosmic intelligence, and that true democracy can only come about through the growth of this collective mature intelligence. Any attempt to build a non-symbiotic or individualistic pseudo-super-intelligence will result in more inequality and finally a monstrosity. In general, the growth of technosciences for the common good can - and will - only be achieved through truly creative democracies. Societies in which everyone needs to be invited and encouraged to realise their full potential - to truly enjoy and master the fullness of life through truly free and creative human intelligence at play in each and every

activity. Like life itself, creative democracies must forever confront the task of creating and recreating themselves, to face ever-new contingencies and unexpected challenges. This is the calling of collective creative intelligence for new human generations. We should realise that only these multicultural, very dynamic, creative democracies, characterised by the unity and harmony of functional, axiological and liberating intelligence, can leave behind the old and futureless alliance between technosciences, plutocracy and imperialism. In turn, in creative democracies, the presence of spontaneous creative intelligence, blossoming through networks, and meaningful in itself, provides an antidote the total dominion of instrumental individualistic short-sighted action, inherent in productive societies of exploitation. This is the great challenge that humanity faces. It is not an impossible utopia but a matter of life or death.

