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Learning new ways of becoming human

The Club of Rome





A DISCUSSION PAPER IN THE CONTEXT OF THE EMERGING NEW CIVILISATIONS INITIATIVE (ENCI)

This paper has been written by Carlos Alvarez Pereira, but it owes a lot to an abundance of inspiring dialogues with Club of Rome colleagues Mamphele Ramphela, Ndidi Nnoli-Edozien, Nora Bateson and Tom Cummings, with Anne Snick and other members of the Club of Rome network, and with thinkers and practitioners from all over the world. Particular credit has to be given to many young women working hard for a better world. The complete list would be long, it definitely includes Amanda Janoo, Audrey Lobo-Pulo, Azadeh Farajpour Javazmi, Cecilie Smith-Christensen, Ina Kukovič, Judy Sikuza, Rebecca Hueting, Samantha Suppiah and Tena Lavrenčić.

As the 50th anniversary of "***The Limits to Growth***" (LTG) is approaching and the tragic consequences of the Covid-19 pandemic humble our arrogant belief in human capacities, this paper is largely inspired by the ideas of "***No Limits to Learning***", the other side of the coin of LTG. It inspires hope to grapple with the question: when will we learn?

EMERGENCE FROM EMERGENCY: ACROSS THE THRESHOLD

A year ago the Club of Rome adopted the lemma ***“Emergence from Emergency”*** to signal the two-sided nature of the challenges humanity is facing. Through its Planetary Emergency initiative the Club is convening a growing number of states, organizations and individuals to acknowledge and respond to the depth and urgency of the intertwined crises in which we are involved. It looks like we are stuck and not reacting to them. We are moving at high speed but at the same time are gridlocked. Life is dynamic in essence and evolution never stops. The creation and resolution of tensions play a significant role in the dynamic. As anticipated 50 years ago by the Club of Rome, tensions between our ever-expanding modes of exploitation and the finiteness of the planet’s resources have now become a critical factor in the evolution of human societies. Those tensions are not the only ones. We are caught in a civilizational trap, due to our deliberate attempt to undermine the relationships that are imperative to life.

The ecological imperative is the most important in the long term. We cannot escape the principles of life. We are not separated from the nature that is giving us breath and food, and we cannot destroy the natural conditions that gives and sustain life without dying in the process. The democratic imperative comes from our aspiration to be heard and belong, be treated with dignity and share a good life with our beloved ones. Contrary to the Western pretension to a universal concept of democracy, that aspiration can take many forms in different geographies and cultures. History also shows that a society can be democratic inside its borders and behave in a completely opposite way in the game of power between nations.

A third imperative derives from the way we relate to time, and how we make use of the heritage of the past to deal with the future, which is always uncertain. Heritage has multiple forms, including ancient wisdom, cultural heritage, the institutions we created and the infrastructures shaping where and how we live. But over the last decades the role of a diversity of heritage has been overshadowed by the rentier imperative, a devastating way of undermining our relationship to time. The trick is to think that the individual accumulation of monetized wealth by itself entitles individuals to receive returns in the future. This rentier approach is designed as the best way to deal with fears of insecurity. The history of these imperative relationships (with life at large, with other humans, and with time) has marked the evolution of human societies. The way we have framed these relationships currently has put them in contradiction with each other. We are now at a climax of the clash between these relationships, due to the growing importance of ecological and democratic imperatives in both geopolitics and everyday life. After decades of extreme financialization the rentier imperative has become an overwhelming burden keeping societies stuck in a runaway mode towards ever-growing debt.

Tensions cannot always be resolved on the same plane on which they were created, nor will they disappear by enchantment. We are at a critical point, and our stuckness at that point will only make things worse, because more tensions will only accumulate. We see cracks everywhere and sometimes they accelerate in an unexpected way, as with Covid-19. Making sense of the

pandemic is not easy, but at the very least it shows how little control we have over life at large. A tiny piece of primeval stuff has been able to destabilize whole systems at a global level, showing that there is no way to separate health, society, economy and politics. In systems dynamics one only gets **out of a critical point through bifurcating branches** leading to different reconfigurations of the system. In the 1970s the Club of Rome gave an anticipated signal of this threshold situation, whose collapse was only delayed through the accelerated build-up of a huge amount of financial debt.

The bifurcation scenario is fundamentally different from a smooth transition from one state to another, as we would have desired. For all our understanding of the complexity and challenges we face, we prefer to believe in a neatly planned and linear pathway to a desirable future in purposeful steps. The more we inquire into the principles under which life operates, the more we understand the centrality of interdependencies, and the less things look linear and subject to our purposes. Emergence is the sign of life, and it cannot be mastered as if we were playing Gods. Emerging across the threshold into something new will mean a dramatic reconfiguration of our societal arrangements, through a journey into **unchartered territories**.

The changes in our **relationships with nature, people and time** need to be radical. Historical precedents are not comforting. For one, the idea of the European Union existed long before it was actually created, and this only happened after the inhuman tragedy of two World Wars, in which the best of human science and technology was effectively put at the service of massive destruction and extermination. For hundreds of millions of people in the world, the way out of the crisis of 2008 has been a tragedy, silent and bloodless but still a tragedy. It has completed a shift in their perspectives: the future of their children will be worse than their own, and now the children are aware of this reality as well. And we are still stuck in the same thinking which led us to the crash of 2008.



Will the transformation be necessarily tragic? The Club of Rome's formulation "**Emergence from Emergency**" addresses this question to ensure a positive outcome. The complementarity of the two poles is well established: they are different faces of an overall theory of change. While the Emergency approach is appropriate to shake up institutional agendas and provoke immediate changes and actions from existing levels of decision, Emergence is about the deeper issues of whole systems change at all levels, including the cultural one. While the two approaches have substantial differences, it is clear though that they are intimately connected. It would be naive to bet on the creation of a new civilization from scratch, as if the existing arrangements of human societies are not going to play a critical role in whatever new can emerge. From this point of view the call to Emergency can invoke deeper transformations and also be the spark for reflections going beyond the stuckness of existing status quos. Conversely, by paying attention to bold alternative pathways, many of them already alive in places around the world, the Emergence approach can bring hope for the future of humanity beyond danger warnings often perceived as cataclysmic and ineffectual.

The Emergence initiative also faces the challenge of complexity. It is of course part of the heritage and uniqueness of the Club of Rome to address the object of any enquiry in its wholeness, with a systemic, global and long-term perspective. But the challenge is real. Despite the recognition that all levels of description of human societies (in terms of metabolism, technology, economy, governance, culture,...) are inextricably intertwined, we continue nonetheless to formulate our expectations of change and proposals of action in linear and simplistic ways. This contradiction derives from how incumbent cultures frame the way we understand the world. How can we consciously change the way we think while we still think that way? This is a dilemma but also an opportunity. The Club of Rome has a unique convening capacity to address the challenge in its entirety. The response to the dilemma is directly related to **new ways of learning**. Chances are that these cannot be exactly planned, but we can do our best to create the conditions for them to emerge.

In crossing the threshold, learning about the biophysical boundaries within which human life is possible on a finite planet is necessary, but not sufficient. Well intentioned attempts of top-down governance will miss the point of complexity and fall short of the transformation of our relationships with nature, people and time. If limited to changing the parameters of the social machinery in order to reduce our ecological footprint, they will clash with reality and lack the necessary legitimacy (as shown with the crisis of the "gilets jaunes" in France). Crossing the threshold also requires being aware of the boundaries and blind spots in the way we think. This includes questioning the belief that the transition can be governed by traditional means and elites. The kind of bifurcation we envision will be a huge, complex, multi-level process of learning (and of unlearning to some extent). It is not about implementing "solutions" that we already know. The bifurcation will be tragic, unless we change our fears and desires. We unfortunately do not know yet how to make that change. Trying to do it in a direct, purposeful way is likely to backfire. Crossing the threshold is not (only) a process of raising people's awareness and disseminating knowledge we already have. It is largely about learning new ways of becoming human, which we have not yet explored or have forgotten.

FROM SEPARATION AND SCARCITY TO RELATEDNESS & ABUNDANCE

Our self-inflicted challenges are often addressed from the perspective of technological innovation. Should we prolong the delusion of highly consumerist lifestyles and ever increasing needs through a sleight of hand of promising technologies? There is no possibility on the horizon of providing the amenities of the “leisure class” to the immense majority of people on Earth, wherever they live. But as Thorstein Veblen pointed out a century ago, the lifestyle of the leisure class frames our desires. What we need is to **shift our concept of wellbeing**. This is where culture comes in. Culture is all we know without knowing we know it. Culture ignores separation, it is built upon relatedness and goes beyond our conscious reasoning to encompass all our capacities. Culture is fundamentally about our fears, desires and taboos, and the ways we have collectively learned to deal with them. It needs to include the way we could change them. Culture determines the frameworks of interpretation through which we make sense of our perceptions of reality, and the ways we behave when in need of food, shelter, relationships and love. The kind of transformations we are envisioning for desirable futures cannot be but cultural.

Separation has been central to the intellectual and cultural history of the last centuries, at least in the Western world. It was a fundamental element of the Scientific Revolution of 17th and 18th centuries. Separation of mind and matter (dualism) as the enabler of objectivity, separation of reason and emotions, splitting of complex systems into pieces (reductionism), society as a collection of separated individuals, and so on. A self-reinforcing mechanism made the perception of distinction (I am different from you and other living beings and inanimate things) evolve into the concept of separation (I am an independent individual), leading ultimately to the fantasy of exclusion (I don't need to care about what happens to you and others). Such framing had many consequences. At some point it may have been useful for the production of new knowledge, although the limitations of the mechanistic paradigm in physics became evident and led to the development of new perspectives, based on relatedness rather than separation. Separation also created an obsession with defining clear boundaries (between humans, aspects of life, countries, and so on).

Not surprisingly separation led to excessive weight being given to competition, both in social life and in the understanding of evolution. It possibly also created a deep anxiety about our fundamental loneliness in a world of isolated individuals competing with each other for scarce resources, driving our fears in the direction of individual performance and accumulation. The perception of scarcity combined with the promise of material abundance for high performing individuals, is indeed a schizophrenic combination that has captured all our social attention. Our obsession on scarcity is rooted in the woundedness of lonely souls. Technological innovation has barely changed anything of that: on the contrary, framed in a culture of separation, it has contributed to the destruction of social fabric and created more inequality, dehumanization and a greater distance between the artificial creation of financial wealth, on one side, and social and biophysical realities on the other.

Alternative cultural frameworks are possible. In a cybernetic perspective of reality separation does not have a prominent role. There are no linear chains of causes and effects, but actions triggering consequences and feedback, expected or not, self-reinforcing or not. This sets off chains of questions leading to responses leading to new questions, and so on. In African cultures and other traditions neglected by modernity, centrality is also given to the relational aspects of being human, as exemplified by the concept of Ubuntu, among many others. The West has wrongly interpreted this emphasis on relatedness as the dominance of the collective over the individual. This is one of our biggest blind spots: we ignore that relationships, collaboration and solidarity are the fabric which gives us our individual strengths and freedom.

Even formal science now recognises this ancient wisdom that a healthy and good life comes from the quality of our relationships. This opens avenues for new learning about wellbeing. We need to organise ourselves so that the essential is taken care of first, not as a fourth or fifth derivative of the less relevant topics that tend to capture almost all our attention. This focus on relatedness could transform the perception of scarcity into one of abundance (which, again, is still alive in many African cultures): this is why **“No Limits to Learning”** responds so well to the challenge posed by **“The Limits to Growth”**. A world of material sufficiency can very well be a healthy one of exuberant creativity driven by the infinite possibilities of relationships within nature. This is the cultural shift we need.

We need to interrogate why the concept of separation has been so effective in shaping our culture. Addressing this issue is beyond the purpose of this paper, but part of the answer comes from the existence of self-reinforcing mechanisms. Separation legitimizes exploitation (of people, animals, natural resources) and the benefits of exploitation legitimize separation in the mind of the exploiter, while its negative consequences can be categorized as “collateral” damage. In our societal arrangements most rules nowadays are designed to ensure the self-reinforcement of private, individualized interest. Under these conditions, it is hard to see how some alternatives based on relatedness for the common good could become successful. This is where values enter into consideration.

Value is an ambiguous word. It designates what we cherish the most when we talk about personal, ethical and aesthetic values. But we use the same word for the mechanism organising the distribution of social energy (wealth) and power. This confusion is pregnant with meaning – in case of a dilemma between the two dimensions, economic value tends to dominate. The creation of economic value is generally taken for granted, as if it was derived from the laws of physics, without questioning its foundations, which are cultural and social. When economic processes and the creation of financial value are more and more disconnected from social and biophysical realities, we need to learn that all values are defined by our fears, desires and taboos. We will not learn new responses without different self-reinforcing mechanisms. And these will not change unless we **change the way we express values**. And changing values requires a change in culture.

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“What we all need at this point in human evolution is to learn what it takes to learn what we should learn - and learn it.”

Aurelio Peccei, in “No Limits to Learning” (1979).

THE ROLE OF THE CLUB OF ROME

From the very beginning the Club of Rome put itself at the leading edge of what has to be learned, by daring to address the future of humanity from a global, holistic and long-term perspective. And it did so by using the most advanced tools of systems thinking for inquiry and learning. It is now urgent to learn also about ourselves: how could we be most effective in enabling societal learning and fulfilling the mission outlined by Aurelio Peccei so long ago? What does it mean to be at the vanguard of systems thinking today? What can we learn from the effects of time and scope on the validity of our own framework?

In spite of a number of attempts, complexity thinking has not been widely applied in the public sphere in the last decades. It has not been driving learning in public administrations and policy-making. In contrast, corporations have been more flexible in renewing their schemes for organizational learning. This enabled them to internalise more ideas and tools of systems thinking and feel more comfortable in dealing with complexity. But most of them are framed by the overarching goal of maximizing financial returns to shareholders and top-level managers. They may be effective in learning in the best possible ways, but within that framing. At some point that inhibits exploring further the ultimate consequences of what they learn, and in particular what could be their contributions to the common good. These outcomes are not the ones the Club of Rome originally had in mind. Overall, as Dennis Meadows outlined in our Annual Conference in Berlin in 2016, it looks like we did not realize how societal learning happens (or not) and how it is framed, promoted or inhibited by culture, in different contexts and scales.

Today more than ever we need the means to make sense of our world, and surprisingly enough that mission has become more difficult in the era of digital technologies and overabundance of information. A large and prosperous sector exists to industrialize persuasion. Fake news and manipulation through social networks is just the most recent manifestation of a much larger phenomenon, namely, the massive, wide-scale construction of perceived reality through marketed discourses. Differentiating what is truly valuable becomes more difficult, and in any case everything goes out of fashion almost instantly. As a consequence, words are emptied of their meaning (think about innovation, efficiency or freedom) and in times of massive propaganda of all kinds, there is a growing disconnection between our systems of sense-making and the social and biophysical realities. Sense-making is becoming more costly and difficult, which for any system is a sign of rigidity and hence of fragility. It prevents new learning and excludes experimentation with alternative views, making the system dysfunctional and paving the way for the failure and collapse which we see already happening.

The first step to deeper learning is to strengthen this sense-making function. The Club of Rome contributed in an outstanding way with ***“The Limits to Growth”*** and ***“No Limits to Learning”***, raising fundamental questions still unanswered. As well described in “Come On”, the mission is far from completed. Indeed, to renew a hopeful perspective for humanity is now more important and challenging than ever. A hopeful perspective has to build upon a substantially different framework,

and the awareness that cultural frameworks are an essential piece of the puzzle. This also means there is no shortcut for our mission. We may be tempted by replicating the method used by the Mont Pelerin Society since the late 1940s for the promotion of the so-called “neoliberal” agenda. A small group of people delivered a message powerful enough to change the discourse and the public agendas in the UK and the USA, and then in the world at large. Interestingly enough, this approach has led to the disconnection of both countries from the globalisation they created - a clear sign of collapse.

Why cannot we do the same for what we think is a much more noble purpose? Because the medium is the message, as Marshall McLuhan would say. The Mont Pelerin message was consistent with an increasingly dominant framework, that of individualism and separation. The focus was on economic growth and the private appropriation of its outcomes under the banner of individual freedom, neglecting any other dimension of our inclusion into the wider web of life. This approach is compatible with a top-down agenda in which the economic elites promote self-serving policies and use persuasion methods to win legitimacy. The attempt was successful. But we simply cannot do the same because our approach is deeply humanistic and based on the opposite of separation. We cannot ignore any aspect of human experiences and life at large, à la John Donne. The kind of frameworks we propose are not dominant today in society. This is why our methods have to be completely different.

THE LEARNING SOCIETY?

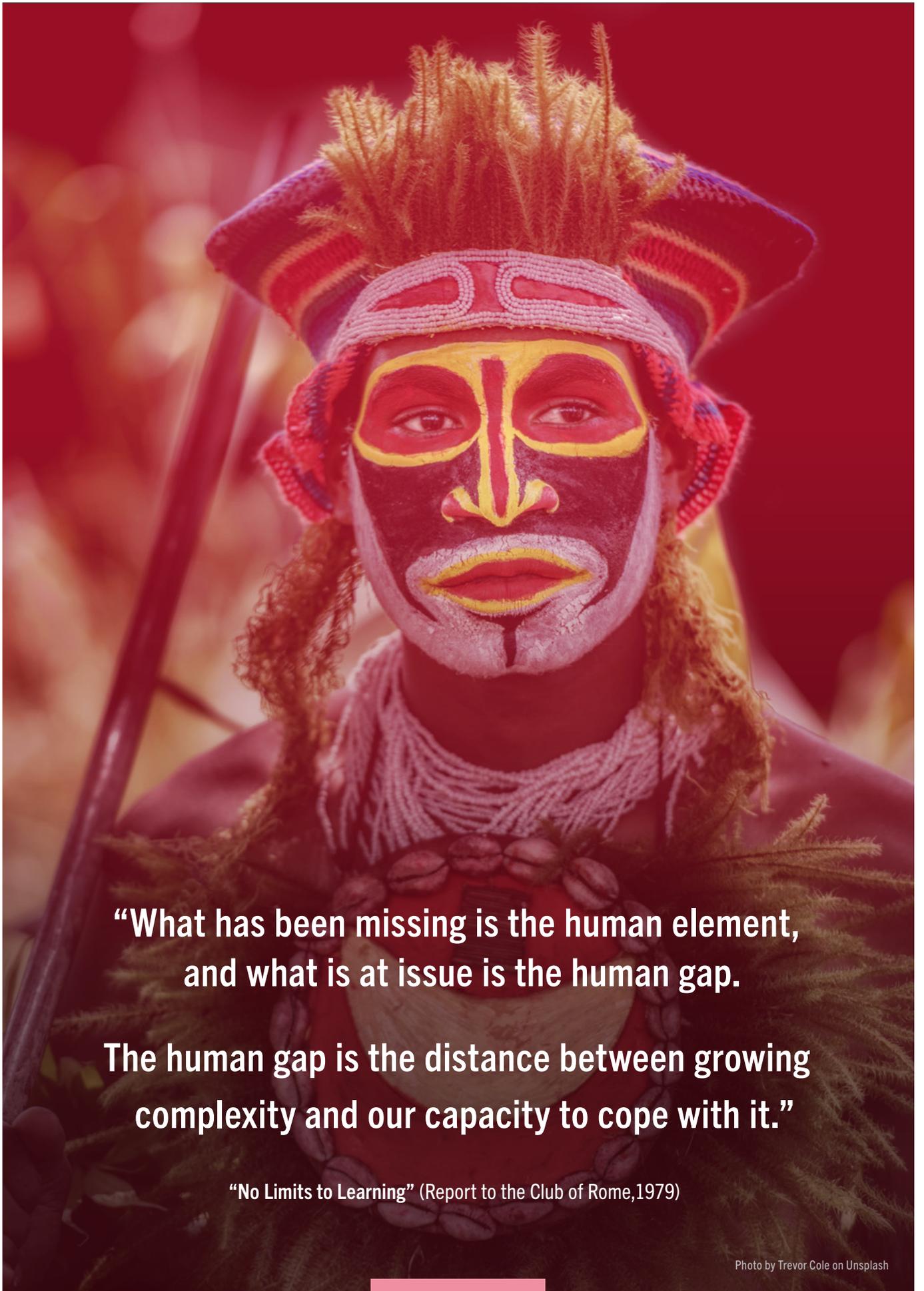
40 years ago, Aurelio Peccei invited us to explore three aspects: What do we have to learn, What does it take to learn it, and the Learning itself. For all our rhetoric about knowledge and innovation, it looks like human societies are not able to meet the challenge. And it is not because we lack information or are not able to understand. But learning is beyond conscious understanding, it is the enactment of the consequences of understanding, embodying them in our individual and collective behaviour. From that point of view we have not learned and continue not to learn fast enough (if at all) through the established procedures. Among other reasons, it does not seem that the elites feel the urgency to promote the kind of learning we need. And there is also a generational issue. Younger people raised with a more acute awareness of our challenges seem to be able to learn what we are not.

How could we understand better what has to be learned? Not all learnings are equivalent and learning to learn is a must. Let us take energy transition as an example. We mostly stick by what we learned long ago, still providing the same response (fossil fuels) to a question whose circumstances have dramatically changed. As wisely explained by Ugo Bardi, the combination of pollution (climate warming) and exhaustion of exploitable fuels will lead to rapid collapse, but the inertia of using the same response which was effective in the past is still dominant, even if the official discourse has changed. This is a basic level of learning - it happens at some point and then inhibits new learning. Shifting to renewable energies would be a new learning, by choosing a different response from a

set of alternatives without changing the question. But in most of framings, this new response still takes for granted that a high and ever-growing level of energy consumption is essential for human wellbeing. If so, humanity is doomed in a finite planet. Then, a different learning could come from asking what would be the lowest level of energy consumption we need to ensure human wellbeing for all. But at that point one realizes that the real question is different - is human wellbeing a consequence of a certain level of energy consumption or of something else, for which energy is certainly required but not the driving factor? Then the understanding of the issue could change completely, bringing in the quality of our relationships as the main factor of wellbeing. Shouldn't we address this question first and foremost?

Why are we not learning? In a nutshell, because we have to widen our perceptions and frameworks, and it is not a comfortable task. We do not have a direct and conscious access to an objective reality. We receive perceptions which we interpret according to cultural frameworks, historically and socially shaped and most of the time implicit. Inevitably this creates blind spots, areas in which our frameworks prevent us from seeing aspects of reality that are inconvenient to our interpretations. New learning cannot happen if we persist in projecting our frameworks of interpretation way beyond the domain and conditions under which they were effective. As in the example above about energy indicates, the questions enabling new learning do so because they expose blind spots, they show where frameworks are no longer effective. They reveal that many of the concepts we take for granted do not make sense from a different perspective. The supposed efficiency of our economic processes is a good example. It is often invoked as a matter of fact or at least an aspiration, but the perception of efficiency is an ex-post construction. We tend to define as efficient what has survived, just because it survived, but this is a result of effectiveness in profiting from socially imposed competition rules. This characteristic does not have much to do with efficiency in the sense of maximizing wellbeing at a minimal footprint.

At least two dimensions make frameworks inappropriate over time: time itself, which changes reality and hence stresses the conditions under which a framework was working effectively, and scope, which reveals the blind spots. We have to learn not only because nothing in life is ever static, but also because the frameworks we were using were never correct, not even for a certain period. They were simply effective and now are not anymore. But they were effective because we were able to ignore their "collateral" consequences. The Western dominance of last three centuries was effective because it could for a long time ignore the consequences and feedback from colonized nations and the destruction of nature. This, in a way, is what the metaphor of "full" vs "empty" worlds explains in "Come On". But of course, for the colonized and the ecosystem, consequences were never collateral. In the 1970s and early 1980s the Club of Rome was expecting that humanity would react positively to the disruptive questions it was bringing to the table, by learning new and better ways of being in the world. Overall this did not happen. If we look at the severity of the self-inflicted emergencies in which we are, it looks like we live in a non-learning society. The mission proposed by Aurelio Peccei 40 years ago is still unaccomplished.



**“What has been missing is the human element,
and what is at issue is the human gap.**

**The human gap is the distance between growing
complexity and our capacity to cope with it.”**

“No Limits to Learning” (Report to the Club of Rome,1979)

Photo by Trevor Cole on Unsplash

FINDING A WAY: COLD OR WARM? WAR OR DANCE?

As suggested above, crossing the threshold towards desirable futures will be a learning adventure for which we don't have a map. Exploration of the territory itself is required. And it will go through the questioning of many of the frameworks we are used to. Also, there could be many different ways of exploration, depending on what choices we make for our **relationships with nature, people and time**. Some of these explorations are already taking place and leading to ugly situations: they are based on divisiveness and exclusion, on pushing separation to its limits. No way of dividing people between "us" and "them" could be compatible with what the Club of Rome has been advocating for decades, which is a genuine Human Revolution. In the path forward, we have better tools to find the way to desirable futures for all.

TRANSFORMING CONVERSATIONS

One of the tools is language, but it is a double-edged sword. Communication is at the core of life, and humans are good at developing and mastering a multitude of languages, verbal and non-verbal. There are thousands of verbal languages as well as mathematics, music, dance, painting, sculpture, and so on. Languages are generative, they are useful to create new patterns and realities, although they never exhaust the description of reality (as Ilya Prigogine said). The multiplicity of languages is probably a good foundation for that future world in which creativity is unleashed. But language is also used to frame thinking in a way preventing new and deeper learning. And this is routinely done for a purpose of massive persuasion, leading to that growing disconnection between discourse and reality, which hinders sense-making.

An example of the dilemma posed by language is the use of the "war" metaphor. War on terror, cancer, climate change, Covid-19: all of them make sense, right? The perception of war is a tool for mobilisation, but the metaphor is fundamentally limiting, it imagines a binary conflict situation in which there is a bad part that needs to be destroyed. War is the ultimate expression of separation. The metaphor cannot work properly in all the matters raised above because the challenges cannot be resolved through destruction of one side or the other, but through the emergence of new patterns. Since killing cancerous cells is not the same as curing cancer, the "War on Cancer" launched in the USA by the Nixon administration in early 1970s essentially failed, and most of the advancements in treating cancer came from elsewhere (many from genomics). The war metaphor is again being used with respect to Covid-19. It makes even less sense because viruses are part of the primeval soup from which life emerged, and they are everywhere, in numbers many orders of magnitude larger than humans. Again, learning at deeper levels is required to deal with the pandemic.

As realised by Donella Meadows at the end of her life, dancing is a much better metaphor when dealing with complexity. It also mobilizes energies but in a more positive way, by creating new patterns and levels of learning which go even beyond conscious reasoning. The cultural transformation we need is made of this kind of shift in metaphors, from war to dance. But before identifying the patterns of new modes of "dancing", language and communication have to be

allowed to ask different questions than those already scripted and leading to fixed responses. This means creating conditions to open new conversations in which all voices are legitimate, starting with those coming from the vast majority of people who are rarely heard (and much less listened to) in the public sphere. This includes voices from all over the world who are ignored, neglected or caricatured in global conversations.

TRANSFORMING EDUCATION AND KNOWLEDGE CREATION

The future of humanity depends on the quality of education today. This undisputable statement does not say much in itself. Is education, as we know it, a good system for expanding our capacity to perceive and learn? Could pedagogical revolutions promoted by Maria Montessori, Lev Vygotsky and others a century ago be adequate to the tasks at hand? The Reggio Emilia approach developed by Loris Malaguzzi (who said that **“children are endowed with a hundred languages”**) is 70 years old. These pedagogies have not become mainstream in education. Does education learn about itself? Moreover, learning is not necessarily the consequence of teaching. Teaching is generally done from an established framework of interpretation, stating what is correct and what is not, hence preventing receivers from asking questions that could illuminate the blind spots of the framework. In this sense it may be effective for the basic kind of learning, the one providing fixed responses to questions. And in that role teaching is the expression of an established power, in the sense given by Karl Deutsch that: **“power is the ability not to have to learn anything”**. In a system of education based on teaching in the sense described above, fixed-response learning prevents other ways of learning. This could have a generalized impact on a society educated in that way.

A reinvention of education is much welcome if it helps to develop the capacity to learn in multiple manners, and to facilitate the emergence of a “learning society”. This requires a different concept of teaching: one which enables in students the capacity of self-reflection, self-consciousness and relatedness to others and to the environment. Learning to learn is the name of the game. That was the main message of **“No Limits to Learning”**. We need to go beyond the basic level of learning in which questions have fixed responses. Different responses from a fixed set can be tried. But we have to go even deeper, into spaces where different sets of responses could be tried and even the question itself could be questioned. And we will need to play simultaneously with the different ways of learning if we want to maximize our chances of learning what we should learn. A lot of what is being tried in the domain of sustainable development is about changing the behaviour of individuals in their daily lives. Some of that can be useful, but it could miss the point of interdependencies. Transformation cannot be an individual phenomenon, it is also social and cultural (and hence political and economic). Piecemeal approaches are a failure of logic, and may prevent learning from happening at the appropriate level. The same could be said of other responses being tried to address our challenges such as technological innovation, wellbeing and regenerative economics, inner transformation, collective leadership, and so on. All of them are interesting within a landscape of learning in multiple ways, none of them is a “fix it” in isolation.

Interestingly enough, the capacity to learn in different ways may not need to be acquired over time, but rather preserved. It may be there from the very beginning. It could be that children

are better systems thinkers than adults. In a way that is what Saint-Exupéry was revealing when he wrote *“Le Petit Prince”* around the idea that **“all adults have been kids, few of them remember”**. A revolution in education is required to activate multiple ways of learning. It goes without saying that the processes of knowledge creation have to be transformed as well. From a systemic perspective §scientific inquiry and innovation are not providing the knowledge we need today. This could have structural reasons due to the persistence of responses fixed at the time when the institutions in charge of research and higher education were designed (end of 18th and beginning of 19th centuries), and later organised into a system of innovation towards industrial expansion (after the 2nd World War).

Structural rigidity is related to the cultural framework of separation, through amongst other factors the split between the “two cultures” - the scientific and the humanistic. A lot is said today about the necessity of multi- and trans-disciplinarity, but this is more discourse than reality. In the current system the legitimacy of asking new questions is reserved for a tiny minority having reached the PhD status through more than two decades of being trained in educational institutions generally providing fixed responses rather than developing multilevel learning. This must have an influence on the inadequacy of research to the challenges of the real world. A new paradigm of “responsible innovation” probably requires that the existing model be put upside down, by legitimising the capacity of people and communities to ask the most urgent and important questions, related to the challenges they face in their everyday lives.

This new paradigm of responsible innovation implies accepting a pluriversity of perspectives. The concept of “objectivity” as the cornerstone of science is part of the paradigm of separation. The position of the observer has to be observed and the conventional meaning of objectivity has to be transcended if we want to facilitate the emergence of new modes of becoming human in the 21st century. Accordingly, we have to go beyond the supposed “universality” of our own perspective to accept that we can learn from other civilizational paradigms (from Africa, Asia, indigenous cultures,...). In addition, the promotion of gender balance is not only a basic issue of social equity. It is noteworthy that the domain of systems thinking has been largely driven by women since the very beginning (coming back at least to Ada Lovelace in the 1830s). The originality of their thinking beyond incumbent frameworks is a testimony to the extraordinary value of what unheard voices have to say.

To sum up, the shift in paradigms of learning envisaged cannot be taught in conventional ways. In this respect, education has to provide the tools for cultural transformation. When considering the way conventional education is conceived, such an aspiration is almost an oxymoron. Instead of reproducing existing frameworks, we are aspiring to create conditions and tools useful for changing our epistemology. This is a tall order, but nothing less will be adequate to the task at hand. It requires the creation of safe spaces for exchanges and experimentation among people of multiple ages, cultures, backgrounds, etc. People as people, not as stakeholders (all stakes are under question at this stage of the evolution of humanity). That creation of spaces can take different forms, but it most probably requires a prominent role for communities acting in a certain “territory” (whatever that means) to develop their own pathways towards equitable wellbeing within a healthy biosphere.

Emergence is the sign of life, and it cannot be mastered as if we were playing Gods. Emerging across the threshold into something new will mean a dramatic reconfiguration of our societal arrangements, through a journey into uncharted territories

ENCI: THE EMERGING PLATFORM. TRANSFORMING REALITY?

The Club of Rome has been working to formulate the challenge of Emergence in a manner respectful of its complexity and at the same time opening the way to practical action. Two years after its creation in the aftermath of the 50th anniversary of the Club, the ENCI program is pushing us beyond our usual frameworks and facilitating collective learning in ways beyond what has come to be regarded as normal procedures.

This leads to the following conclusions, at this point:

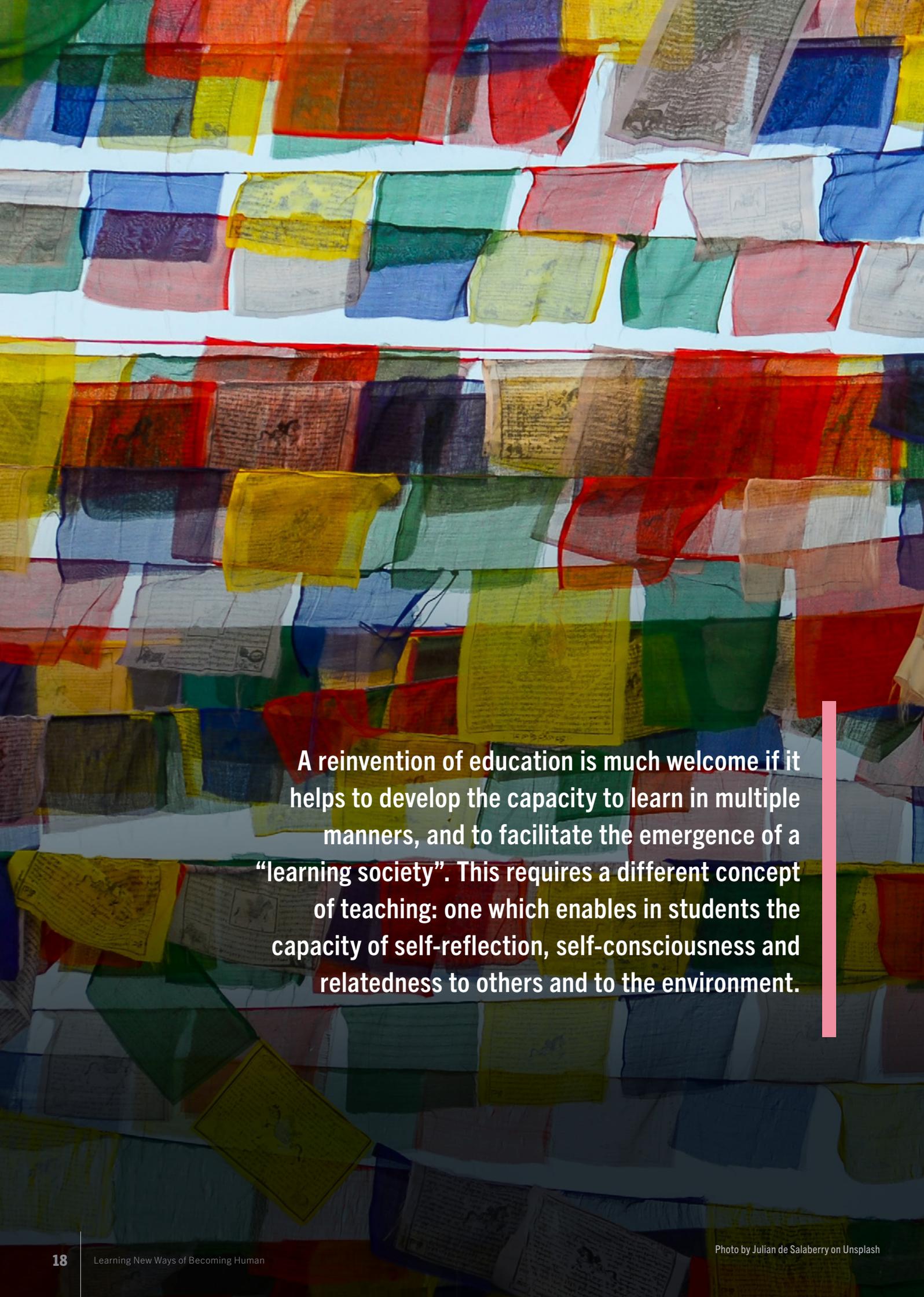
- **Emergence is a cultural transformation:** it deals with the entirety of human experience, even beyond conscious reasoning. We need to mobilize the transformative capacity of multiple forms of human exchange and artistic expression in order to create the conditions for different configurations of our fears, dreams and taboos to emerge.
- The gap between “values” (at personal, ethical and aesthetic levels) and “value” in the economic sense is a major issue. Realignment is required to make the creation of economic value contribute to the preservation of the values we cherish the most. This means shifting **from a perception of separation and scarcity to one of relatedness and abundance**. This is the connecting point of ENCI with the Reframing Economics and Rethinking Finance hubs.
- Taking into account the richness and complexity of the global landscape of today, a **pluriversity of perspectives** is also required: there will not be one focus of transformation but a myriad of them. We have to leverage a multiplicity of worldviews from many African and Asian cultures, as well as indigenous cultures all over the world, which have been ignored during the era of industrialization. Attention to communities experimenting with their own pathways towards sustainable wellbeing is essential.



Photo by Alex Tevere on Unsplash

- Emergence means going **wider in perception and deeper in learning, and learning how to learn**. It requires broadening the dominant frameworks based on linear thinking and mechanism to make the most out of leading-edge systems thinking, based on our cybernetic and eco-systemic perceptions of life. Conventional expertise may actually hinder the new learnings we need.
- This requires engaging **new conversations to uncover our blind spots**. People have to leave behind their roles as stakeholders or experts of the existing status quo, which prevent them from seeing what we need to learn anew. This means that all voices are legitimate, a vast majority of them being unheard in current conversations. This affects especially women, younger generations and all voices whose possibility to be heard in the global media sphere (dominated by Western worldviews) is limited or non-existent. This connects ENCI with the hub of Youth and Intergenerational Dialogues.
- New ways of learning imply also **reinventing the processes of knowledge creation**. The current model, based on institutional designs and sets of questions developed in other historical circumstances, is now inhibiting our capacity to acquire the learnings we need. Better questions have to be posed, driven by the concrete challenges of people facing collapse in their communities, and the concept of siloed disciplines has to be ended. The role of technological innovation has to be questioned and reframed to contribute to desirable futures.

Based on these findings the Club of Rome is starting a new program of activities combining the build-up of a wide outreach with a careful process of creating the conditions for a shift to happen in the way challenges are framed. This includes promoting new agendas of responsible research and innovation to facilitate the exploration of the uncharted territories of Emergence. The first step on this journey is to provide safe spaces to ask better questions and promote experiments into new pathways towards sustainable wellbeing. The concrete ambition is to reach 10.000 communities around the world in 2 to 3 years, which would ignite a quantum leap into cultural transformation.



A reinvention of education is much welcome if it helps to develop the capacity to learn in multiple manners, and to facilitate the emergence of a “learning society”. This requires a different concept of teaching: one which enables in students the capacity of self-reflection, self-consciousness and relatedness to others and to the environment.



The Club of Rome is a platform of diverse thought leaders. Drawing on the collective know-how of our members, the organisation provides holistic solutions to global issues such as climate, economics and the wellbeing of humanity. It promotes policy initiatives and action so that humanity can emerge from its self-inflicted planetary emergencies.

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