

Global Issues and Events. Relationships, Understanding and Actions at Individual and Community Levels

Osman Arrobbio^{1,2}, Elena Camino¹, Laura Colucci-Gray^{1,3}, Martin Dodman¹ and Enzo Ferrara^{1,4}

¹ Interuniversity Research Institute on Sustainability, Torino (Italy)

² University of Turin (Italy)

³ School of Education, University of Aberdeen (UK)

⁴ Istituto Nazionale di Ricerca Metrologica, Torino (Italy)

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Corresponding Author: Osman Arrobbio, Italy.

E.mail: osman.arrobbio@unito.it

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The period between the two solstices of 2016 and the fifth and sixth issues of *Visions for Sustainability* has witnessed some events of considerable global significance. The 'Paris agreement' - a formal convention that followed COP 21 - has been either signed or ratified by 116 out of 197 party states. In the meantime, the 28th Meeting of the Parties (MOP 28) held in Kigali (Rwanda) on October 8-14 2016 will probably emerge as one of the most important international agreements on banning a single category of substances, that of ozone depleting chemicals.

In the same period, however, other events have given cause for considerable concern. Data provided by the network of weather stations around the world registered global temperatures in 2016 as the highest ever recorded, further highlighting the urgency of acting to reverse this trend. At the same time, the election of Donald Trump as president of the United States has regrettably confirmed that country's lack of desire to assume a guiding role in the search for solutions to global environmental problems. Indeed, no country seems to be willing to play such a role, while, unfortunately, there are many, including the United States themselves, that vie with each other for geo-political dominance.

This does not mean that even an apparently favourable result in any presidential election could ever be sufficient to bring about rapid change and put humanity on a more sustainable pathway within the perennial tangle of conflicting interests in the political, economic and military spheres. Nonetheless, a certain degree of anxiety concerning the worsening of the current situation inevitably involves the moves of the next US president on environmental issues and the first signals are not encouraging. It appears that the NASA Earth Sciences Division is likely to see its funding cut in favour of space exploration. The President-elect had in fact set a goal during his presidential campaign to explore

the entire solar system by the end of the century.

As often happens with the great majority of political elections, it is hard to identify specific reasons why voters decided as they did, which parts of the political programs they paid more attention to, and how they evaluated their potentially beneficial and detrimental effects in terms of the outcomes they foresaw. It is difficult to assess the importance that voters of Donald Trump gave to his anti-environmental position, for example, his refusal to accept scientific evidence of anthropogenic climate change. While his stance might seem to us a good enough reason to vote for his opponent, it is clear that climate and environmental protection are top issues neither in his political agenda nor in the minds of those Americans who voted for him.

As always, the current issue of *Visions* offers a diverse set of papers concerning the centrality of sustainability for every aspect of the human enterprise. Each of the various contributions deals with a particular dimension of the global issues involved, concerning relationships and actions at the level of the lives of individuals or small communities, dealing with changes and choices, ethical and emotional attitudes, ways of being expressed through the interaction of genetics and socio-environmental contexts. At this micro-level it is possible to counteract the strategies adopted at the macro-level within the dimensions of politics as the exercise of power and Earth system governance. Forces operating in this macro-sphere may influence voters' choices and citizens' behaviour in the short term, but their outcomes in the longer period are more difficult to predict. In many cases, unforeseen consequences take place in such complex systems involving both individuals and communities.

We frequently risk losing awareness of what happens beyond our sight and what may happen as a result of our political and economic choices. The challenge we always face is to act with an eye to the biosphere and its myriad and multifaceted manifestations in order to pursue sustainable life trajectories, to become aware of what we lose as individuals and communities through risking a progressive detachment from nature and its living systems, its expressions and transformations, which by far transcend us. Each paper proposes a perspective which aims to help overcome the sense of anxiety, helplessness and confusion caused by macro-events and the temptation to give up, discouraged by the mainstream flows of media manipulation, and offers ways of understanding and acting directed towards the fulfilment of our fundamental needs, such as nourishment and wellbeing, developing contact with our inner and mysterious complexity, cooperating with other living beings, developing autonomy and assuming responsibility, as summarised by the Gandhian concept of *Swaraj*.

In “Life, Labor, and Value. Recreating Affective Food Ecologies Through Interspecies Cooperation”, Jeffrey Baldwin explores affective ecologies within the field of food and agriculture. He examines the concept of value in terms of the biosphere as a whole and the way in which life often produces value by finding usefulness in the by-products of other lives. The paper then proposes an idea of ecological relationships as guided by the creation of abundance and shows how cooperation can produce value synergistically and provide a basis for a socio-natural trajectory, creating more affective food ecologies.

In “Looking Back and Moving Sideways: Following the Gandhian Approach as the Underlying Thread for a Sustainable Science and Education”, Laura Colucci-Gray and Elena Camino adopt the principles of Gandhi’s *Sarvodaya*, or benefit for all, as guiding tools

for reviewing models of knowledge and ways of learning. Gandhi’s principles point to nonviolence in human relationships with living and non-living entities. Nonviolence is the key principle for an education which promotes awareness of interdependence and the close linkages between ecology and equity.

In “Biophilia as Emotion”, Giuseppe Barbiero and Chiara Marconato examine biophilia and biophobia in the context of the child’s emotional development. Their conclusion is that the biophilic emotion constitutes a fundamental resource available to all human beings who are aware of their dependence upon the natural processes of this world, from which each of us draws physical, psychological and spiritual nourishment.

In “Researching the Sustainability of Teacher Professional Development”, Martin Dodman explores the relationships within and between learning environments and professional profiles. He links the concepts of autopoiesis, organization and structure as a model for analysing these relationships together with those of resilience, transformability and force-field analysis as a way of investigating the sustainability of change and consequent development in individuals and communities.

In his review of Sam Kean’s book, *The Violinist’s Thumb*, Enzo Ferrara illustrates how vibrant storytelling can make science entertaining. The title of the book refers to Niccolò Paganini, the Italian musician whose genetic shift caused him to have exceptionally flexible fingers, which both made him a master of violin and also caused pain because of the deformation of his joints. Kean blends the human histories of scientists, artists, athletes and nuclear bomb survivors with explorations of DNA, making accessible to readers the complex biological mechanisms ruling the building blocks of life and rendering science more sustainable for all.