Expanding visions for sustainability

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When we founded our journal ten years ago, we chose the name *Visions for Sustainability* because we wanted to combine two ideas. One was proposing different ways of looking at sustainability, how diverse disciplinary, interdisciplinary, and transdisciplinary perspectives could enrich our understanding of the concept itself. The other was exploring how such perspectives on sustainability could provide a range of ways of looking at or shedding light on the relationship between *homo sapiens* and the planet we inhabit, what we have always called, after Prigogine and Stengers (1984), humanity's dialogue with Nature and itself.

Seeing, knowing, transforming

The word "vision" is often considered as stemming from the Proto-Indo-European root *Weid*-, meaning "to see". At the same time, it is linked to Sanskrit *veda* "I know", with a subsequent intertwining of seeing and knowing, such as in Greek *oida*, (literally, I know because I have seen) and in the development of modern European languages, such as Gothic *weitan* "to see" and German *wissen* "to know". This winter solstice brings the publication of the twentieth issue of *Visions for Sustainability*. In this ten-year period, there have been various developments in terms of the aims and scope of our journal, in how we have tried to promote a dialogue involving ways of seeing and knowing, thereby understanding the concept of visions in relationship to sustainability.



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Meanwhile, profound, and often unexpected, changes have taken place in our knowledge of the transformations of our planet, the meanings attributed to the concept of sustainability, and the actions taken, above all by the main global economic and political actors. The prospect of a collective and cooperative effort at a global level to redirect human activities towards having a lower impact on the planet has been displaced by a further drift towards the imposition – on the part of an ever more greedy minority driven by a global military-industrial power system – of a capitalist logic of unlimited exploitation of the resources and degradation of the quality of natural systems (involving all ecosystem, including human, services), placing immediate profit for the few before the protection and care of all, human and non-human, living beings. This progressive shift in the current scenario has influenced the way in which we have gradually transformed our ideas of visions for sustainability and our way of envisaging how they might be translated into action.

Extending our dialogue with authors

From the outset, we wished to be an author-friendly journal and to establish a dialogue based on feedback and feedforward with all those who are interested in publishing with us. Over the past ten years we have seen an increase, at first gradual and then more rapid, both in submissions to our journal and consequently, through a careful peer review process, the number of papers we have published. We have endeavoured to refine the passage from submission to publication so as to render each of the steps as constructive as possible. Each submission is first assessed to ascertain if it is coherent with the aims and scope of our journal, above all if it is actually proposing a vision for sustainability. If the outcome is negative, we communicate this to the authors and explain the reasons why we believe this. This currently applies to around fifty percent of the submissions we receive. If a submission has a positive preliminary assessment, we send it for peer review and subsequently we write to authors to give them detailed information on reviewer comments and accompany them during the process of revision necessary before we can proceed to publication.

At the same time, papers submitted and published have increasingly come from and focused on a wide range of diverse geographical locations, encompassing North and South America, Europe, Africa, Asia, and Australasia. We have received and been pleased to host many studies from different parts of the Global South, involving areas facing particular challenges concerning the definition and promotion of sustainability in the light both of global inequalities and cultural specificities. At the same time, we have extended the range of visions proposed

by authors within interdisciplinary and transdisciplinary perspectives that encompass natural, social, economic, political, and other sciences, as well as philosophical, humanistic, and artistic fields.

Emerging questions

Over this ten-year period, we have also seen various interesting trends. Increasingly, articles appear more focussed on and linked to an assessment of progress towards standardised measures such as Millennium Goals and Sustainable Development Goals. At the same time, we have always tried to emphasize problematic aspects in the definition and achievement of such goals. Should we not analyse what they propose in a critical way? Are they not based on the very anthropocentric worldview that has caused our current problems? Can such a worldview be expected to see and know how to solve them? Should we be attempting to find ways to promote the goals foreseen or should we be promoting the need to rethink the goals or at least how they all too often seem to be automatically linked to the ideas like that of green growth and technological progress? If unlimited growth is clearly unsustainable, can, for example, steady state economy or circular economy models provide the basis for sustainable human trajectories?

In whatever way goals are defined, it seems that progress towards them has been too slow. Existing systems of provision, manufacturing and consumption exhibit high degrees of inertia, making any kind of process towards sustainability transitions an extremely complex affair, posing many questions without any easy answers. The latest report published by the United Nations (2023) makes it clear that addressing the great sustainability challenges of energy, food, and transport is a matter of urgency calling for large-scale experimentation with emerging innovations, but also the involvement of multiple actors engaged in broader system transformations. This is both an interesting and problematic proposition, which demands action at the technical/pragmatic level based on the question "How do we accelerate", without, however, an equivalent consideration of the ethical and normative level: "Should we accelerate? and "What are the costs and implications of such an acceleration?".

The question of acceleration leads also to that of the relationship between culture(s) and vision(s). The great acceleration of the 1950s onwards and the consequent dramatic changes in socio-economic and Earth system trends driven by a growth paradigm were all essentially a product of the establishment of the hegemony of a dominant technoscientific culture at the expense of other cultures Dodman et al.

capable of proposing different human trajectories. Moreover, this is inextricably linked to the relationship between vision and action proposed by Meadows et al. (1972) whereby "Vision without action is useless. But action without vision does not know where to go or why to go there. Vision is absolutely necessary to guide and motivate action. More than that, vision, when widely shared and firmly kept in sight, brings into being new systems". Within a dominant technoscientific culture, ideas for action today are all too often based on a kind of techno-optimism that imagines that new technologies can provide the answer to all our problems.

While one side of the research community is looking for generalizable lessons to facilitate acceleration, we believe there is an urgent need to re-vision so as to bring forth other voices and other forms of experience which speak about how we pay attention to all those living beings with whom we share a home, those from whom we intimately depend, those who do not disappear in our wake but speak to us as we seek out a way to listen to them. This is perhaps the true nature of sustainability, not as a set of problems to be solved or a big task to get done, but rather the way in which sustainability calls for an ongoing and stubborn attempt to sit and listen, above all to consider the relationship between interior and exterior vision. Reflecting on the worlds inside us and surrounding us. Becoming more aware of how we shape the world we inhabit through our conscious and unconscious thinking (Colucci-Gray, 2023). Exploring the self as a mystery, the discovery of psychic and spiritual energies and unexpected visions. Examining the relationship between oneself and the "external" world and carefully considering the tools to develop it. Recognizing the importance of positive attitudes such as trust, empathy, curiosity, gratitude, joy. Understanding the material and spiritual needs of the entire planet, of all its biotic and abiotic components.

Ten years ago, we might have thought that by increasing scientific knowledge, and making the reports of witnesses and activists known all over the world, political leaders and decision makers would be pushed to enact laws to safeguard ecological justice and stop violence, but it clearly has not happened. On the contrary, we have become compelled to helplessly witness violence and abuse both of the environment and human communities, by way of mines, dams, waste production, and countless other examples, both in the name of "progress" and on the basis of a division of the world between "friends" and "enemies". The unacceptable has become habitual. The fact that there are currently 32 ongoing wars in the world demonstrates this dramatically. There is a widespread conviction that the enemy must be exterminated, and the hostile communities and the environment are a collateral component of no relevance. The belief that violence is the only way to counteract injustice and oppression is increasingly widespread,

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and the violence overwhelms not only humans, but all living organisms and the physical environment they inhabit. Any vision for sustainability must surely be based on the rejection of violence, in all its forms, cultural, structural, and direct. And to this aim, the challenge for sustainability, across all domains of society and within lifelong and lifewide education, is that of nurturing and cultivating the concern for life, in all its biodiversity, and its continuation in conditions of planetary health and wellbeing.

Perspectives on resources, production, consumption, and waste

In the 20 issues published thus far, we have endeavoured to give space many different visions regarding how what current hegemonic economic models often call the concepts of natural and produced capital are both inextricably entangled parts of cyclical feedback loops involving the multiform processes related to resources, production, consumption, and waste that characterize human trajectories. These visions have proposed both theoretical and research-based perspectives which aim to add something to our understanding and application of the concept of sustainability, together with educational and experiential perspectives that emphasize the importance of formal, non-formal and informal learning processes for all members of human societies and at all ages. The papers published have either been a part of general issues containing an increasingly wide range of topics or as part of special issues focusing on areas ranging from science education to slow tech, from wellbeing in built environments to health and degrowth, and, most recently, water sustainability and climate change. Our current issue contains papers related to each of the topics that previous issues have developed.

Water and wood are two examples of resources that are emblematic in terms of their use and exploitation by human societies. Different aspects of the question of water sustainability, the nature of water as essential for sustaining life on our planet, its unequal distribution as a source of injustice and permanent conflict, the anthropogenic water cycle and the science and technology of water quality and its management worldwide, are present in three contributions. Shé Mackenzie Hawke reviews Veronica Strang's book *Water Beings: From Nature Being to the Environmental Crisis*, while other aspects are presented in Khamdevi's paper "A systematic literature review of architecture-related dew and fog harvesting" and Alcívar Intriago, Vera Vera, Muñoz Anchundia & Vera Salavarría's paper "Topographic humidity index and vegetation as management tool for policies decision". Wood science and wood research are focussed on from the perspective of ongoing studies of forest conservation and management proposed by Chisika & Yeom in their papers "The perception of benefits from the 'adopt-a-forest' initiative in

Kenya" and "The challenges of sustainable conservation and management of mangrove forests in Kenya", and also in the study by Chisika, Park & Yeom "Public perception on the role of Artificial Intelligence in the sustainable management of tree and forest resources in Kenya".

Energy resources have emerged over millennia as an increasingly key aspect of human trajectories and in particular the need to identify and exploit renewable energy sources has become a key quest in the endeavour to render those trajectories sustainable. Previous issues have dealt with various aspects of renewable energy and No. 20 focuses on this from the perspective of the energy necessary for the functioning of built human environments. In "Building design based on zero energy approach" Bagheri, Barfeh & Hamisi look at ways of designing and building zero-energy housing, while both Sharma, Bukya & Kumar in "PVsyst modeling of 800 kWp capacity grid-tied solar photovoltaic power plant for academic institution" and Guvenc, Canikli, Can-Güven, Varank & Akbas in "The carbon footprint of a university campus. Case study of Yildiz Technical University, Davutpaşa Campus, Turkey" look at ways in which universities, which house the very academic communities who should be at the forefront of sustainability science, can be analyzed in terms of their overall functioning.

The sustainability of production processes involves numerous complex intersecting variables including use of natural resources and energy, pollution, economic viability, the safety and wellbeing of workers, communities, and territories. All of these have been considered in previous issues and No. 20 and various perspectives on local communities and rural areas in the papers "Model of community empowerment in utilizing Purun (Eleocharis dulcis) resources for sustainable handicrafts in Indonesia's rural peatland communities" by Azni, Alfitri, Yunindyawati, Riswani, & Pellizzoni, "A sustainable creative economy development model using a penta-helix approach based on local wisdom in Magelang City, Indonesia" by Prajanti, Daud, Amin, Subiyanto &Adzim, and "State regulation of sustainable development of rural areas in the system of food security of Ukraine" by Fedchyshyn, Ignatenko, Chyryk, & Danilik. The question of the sustainability of production processes in larger-scale enterprises is addressed in" How the strategic to achieve corporate sustainable performance? The role of mergers, acquisitions and ownership integrations" by Widjajanti, Lestari, & Sugiyanto, while the question of sustainability within a particular industry is examined by Jie, Tan & Shi in "Fostering sustainability in China's textile industry. The role of education for sustainable development", a theme that is further developed from various perspectives in the dedicated special section containing educational visions.

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The question of the sustainability of different lifestyles, related consumption patterns, and the transport of goods to satisfy demand has also been a feature of previous issues. No. 20 continues this focus with papers by Saxena, Kumar, Singh, Bisht, Chaudhary, Semwal & Chaudhary on "Bridging the attitude-behaviour gap in sustainable consumption for electric vehicles in India. A theoretical proposition", Rawat & Sahni on "Embedding SDG 12 in consumer behaviour. A survey of knowledge, attitude and perception for sustainable consumption", and Safuan, Ramadian & Selasdini on "Environmental, Social and Governance implementation in Indonesian ports. A qualitative approach and its impact on global sustainability".

Previous issues have also focused on the relationship between patterns of consumption of goods and services, pollution and waste production and management. In No. 20 Nkomezi, Uwimbabazi & Yeom, C. look at the "Socio-environmental impacts of landfill site in Nduba sector, Kigali, Rwanda", while Vivas Saltos & Cedeño Vargas analyze "Fishing industries' oily wastewater biodiesel performance". The question is also considered from the point of view of space pollution by Pla in "Artificial space debris and Kessler syndrome. A limitation for humankind".

Previous issues have proposed various visions of the way in which human trajectories are characterized by processes related to resources, production, consumption, and waste is inextricably connected by our attitude towards and capacity to mistreat the planet we inhabit and depend on. An analysis of this is proposed by Hawke in "The liberating theology of a planet's beneficence: a possibility".

If we are to change attitude and way of acting, then education is clearly of the utmost importance. Previous issues have contained many papers focusing on different aspects of this, and No. 20 contains a special section on "Conserving nature: the contribution of ecological research to education". In this section, as guest editors, Lorenzi & Sangiorgio contribute an editorial which explores the theme of the section itself, Vicente, Leitão, Quintino, Pombo, & Rodrigues offer an analysis of "Urban vegetable gardens as an environmental education tool for promoting primary school students' engagement in EU Green Deal strategies", Rota, Canedoli, Fava & Padoa-Schioppa look at "Introducing children in the primary school to the concept of ecosystem services", and Bartoccioni, Lorenzi & Sangiorgio propose "Sustainable food consumption and Nature conservation processes. Educational considerations".

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Polycrisis, ecological phronesis, aesthetic vision and action

As we look ahead, we ask ourselves questions relating to what evidence there may be of how sustainability is maintained, or not, in different contexts and at different levels of complexity from quantum physics to the science of the universe, involving such complex questions as reversibility and irreversibility, dynamics, process dimensions, equilibria, and diversity. Or in the realm of life sciences, where only a continuously evolving circularity of interacting organisms, populations, and communities, both biological and sociocultural, can provide the basis of sustainability. Scientific visions represent a unique capability of human beings to reflect on their world and also on themselves, and, whatever their field of investigation, must include the sense of limitations and constraints. At the same time, scientific exploration risks becoming ever more a prey to vested interests, denying any form of limitations, offering misleading visions of what is sustainable or not.

Increasingly, our dialogue is concerned with developing an ecological approach to thinking about the relationship between the life of the mind and the world it inhabits. This means considering different ways in which the imagination produces and impedes directions of action. In some cases, a vision may need expanding, deepening, or elaborating. In other cases, it may be too detached from engagement in the world, merely "spectator" theory, rather than part of embodied praxis.

Moreover, there is also the question of the ecology between visions, and between that ecology and the world. This means perhaps no specific vision is necessary and sufficient, but context dependent and dialectically interacting with other visions to create feedback loops that can lead to patterns or dynamics that sustain or not. What this implies here is that a particular vision, no matter how good on paper, may be destructive if developed too far, or relied on too often, or insisted upon in the wrong circumstances. Thus, we are also concerned about how visions of sustainability can potentially contribute to unsustainability.

We see the ecological crisis as a polycrisis, where human physical, social and spiritual health is imbalanced, both in itself and in its relationship to planetary health. Moreover, the dysecologies in one domain are interconnected with those in another. This means intervention points are potentially everywhere, improvement is contingent, fallible but an ongoing possibility, and that different people, and same people at different times, may be attracted to attending to the healing of one part of the ecology rather than another. We see the perception of healthy ecology or dysecology as primarily a matter of aesthetic seeing and knowing

http://dx.doi.org/10.13135/2384-8677/8929

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(Affifi, 2023), considered to be a way of knowing that perceives the quality of relationships, gestalts whose integrity, or lack of it, is felt in aesthetic experience. In this sense, aesthetic vision is an embodied and emotional encounter with otherness, and, as a foundation for any consideration of how we "should" live, the basis of ethics. Navigating ecological phronesis and the ecological interaction between visions is also aesthetic, insofar as it involves sensing the quality of the relationship between interacting visions, and what they do in the world. Recognizing this is fundamental for building and exploring new visions for sustainability.

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