Editorial

Interspecific and intraspecific relationships in vision and action.

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When founding our journal, we took inspiration from Donella Meadows' assertion: "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" (Meadows et al., 1972, p.102).

Just over twenty years later, while affirming that "vision is the most vital step in the policy process", Meadows was, however, led to make the following statement: "Environmentalists have been especially ineffective in creating any shared vision of the world they are working toward – a sustainable world in which people live within nature in a way that meets human needs while not degrading natural systems" (Meadows, 1994, p.1).

Nearly another thirty years have by now passed, and, despite increasing and widespread awareness of the unsustainability of human trajectories and the urgency required in envisaging alternatives that enable acting to build new sustainable trajectories, it is clear that the shared vision Meadows considered essential is far from being achieved and the action (to be) taken is far from being concerted.

Visions can involve diverse ways of seeing, imagining, and representing the past, the present and the future. In each case, what we see depends on how we see, what viewpoints we (are able to) adopt and what they allow or oblige us to see. Visions are thus as much a question of what we cannot see as what we can see. This may consist of envisioning what sustainability (or unsustainability) is, what is unsustainable in our current world and way of being, what a sustainable world might be, and how human beings can act towards achieving and maintaining it.

Scientists, policymakers, and policy implementors all have vital roles to play in defining visions that can both globally encompass the multiple, interwoven aspects involved in such a complex construct (idea and edifice) as sustainability and also help underpin and deliver actions to realize it in practice. All the papers in this issue deal with an aspect, either related to theoretical or research visions, of the multi-faceted relationship between ideas and action, or ideas-in-action in a range of diverse geographical locations that encompass four different continents.

Each one of the first four papers offers a particular perspective on the interspecific relationships characterizing the dialogue between *Homo sapiens* and nature and the intraspecific relationships characterizing the dialogue between members of *Homo sapiens*, both of which are fundamental components of visions and actions for sustainability.

In "A review of worldviews beyond sustainability: Potential avenues for human-nature connectedness", Fitzpatrick argues that, although there is increasing awareness of worldviews as leverage points for transformative change, deeper understanding of the nuances between worldviews and how they frame complex human-nature relationships is needed. Her paper proposes a review of current literature on how sustainability can be conceptualized across diverse worldviews, as both a narrative and visual "map". She aims to connect transdisciplinary concepts through concrete examples, highlight gaps, and critically reflect on limitations and potentialities in dealing with the complex relationship between worldviews and sustainability, systems change and transformations.

In "Intergroup selection as a way to peace and sustainability", Giraldo- Suárez and León Rodríguez examine the relationship between a demand for resources that exceeds the ability of the biophysical system to regenerate itself and the concomitant risk of violent conflicts. They propose a theoretical vision based on the intersection between approaches to sustainability transition, complexity economics, and peace through a vision of complex systems. Their aim is to show that, by promoting cooperative behaviours through intergroup selection processes,

progress can be made toward sustainability and the emergence of peace as a stable behaviour.

In "Biophilic design of building façades from an Evolutionary Psychology framework: Visual Attention Software compared to Perceived Restorativeness" Berto, Barbiero and Salingaros analyse how built environments that integrate representations of the natural world into façades and interiors benefit occupant psychophysiological well-being and behaviour. They assert that the biophilic quality of buildings does not depend exclusively on their being "green", but also upon "organized complexity" in their structure. Through an exploratory study they compare quantitative and qualitative approaches in the perception of biophilic design of building façades and demonstrate how higher perceived restorativeness and preference match a higher degree of biophilic design corresponding to a building where vegetation is integrated in an organic structure. They argue that exploring organized complexity is fundamental for understanding human responses to architecture.

In "Sustainable development through aesthetic expertise? Results and reflection on an experimental case study on arts-science policy intervention", Heinrichs and Hoernemann present a prospect for arts-social science collaboration in the context of sustainable development. By uniting conceptual and methodological perspectives of sensory, arts-based sustainability science and artistic inquiry and intervention, they explore a new approach for collaboration between arts, social science, and policymaking. They describe an experimental case study in order to show how their model of arts-social science-policy intervention can provide aesthetic expertise by co-creating scientific and artistic insights and developing creative options for sustainable development at the local level.

It is evident that the survival of life on our planet as we know it today depends on forests and the essential ecosystem services, such as carbon sequestration, biodiversity conservation, and the protection of water resources that they provide. At the same time, forests continue to be destroyed and plundered. The next two papers deal with different aspects of envisaging what sustaining forests entails and acting coherently in this respect.

In "Citizens' willingness to pay for private forest certification in Kenya", Chisika and Yeom examine the question of the management of private forests through certification in the context of promoting sustainable development. Their study draws on a literature review and data from online survey questionnaires to gather information on citizens' willingness to accept or pay for this. Various steps government has taken to support forest certification seem to have contributed to the

high level of willingness to pay or accept private forest certification among study respondents who were already consuming certified products. At the same time, the authors argue that there is a need for increased education and awareness on private forest management certification, further studies on the type and market share of certified products from private forest that are consumed, and formulation of regulations for operationalizing incentives for private forestry development.

In "When a Good Policy Goes Bad. An analysis of framings and silences in Uganda's 1995 National Environment Management Policy and effects on forest conservation", Namanji analyses why, even nearly three decades after an ambitious policy for forest conservation and management was introduced, Uganda still experiences large scale loss of forest resources. The author examines how the problem of forest and biodiversity loss is represented in the NEMP and the ways the policy has been disseminated, defended, or contested. The paper concludes that the basic problem still to be addressed are the active silences such as corruption and ignorance that underlie environmental injustices and are worsening forest degradation.

Eventual developments in the current consumption-based growth model at the heart of our planet's interconnected economies and any vision for changing the future of our way of life depend on ways of enabling sustainable human access to energy. India has recently become the country with the world's largest population, and this means that such questions are of critical global significance as well as crucial for the work of scientists and policymakers in that country.

In "Decentralization to decarbonize the Indian economy", Shankar and Bukya consider the question of renewable energy in terms of how energy generated at the centralized level has significant shortcomings and the need for a shift to decentralized energy. The authors demonstrate how the Indian government has taken several initiatives to increase domestic manufacturing capacity, particularly for solar PV, electric vehicles, and batteries. The paper analyses achievements reached through various renewable energy schemes and also projections related to India's ambition of net zero through a policy of decentralized use of renewable energy technologies.

In "Demystifying the economic and energy potential of Building-Integrated Photovoltaics in achieving India's intended Nationally Determined Contribution", Shankar and Bukya look at programmes in India for promoting clean energy, enhancing energy efficiency, and developing resilient urban centres. They examine the need to use renewable energy sources optimally to meet the energy

requirements of buildings in smart cities and how limited rooftop space in an urban environment can be overcome by using building-integrated photovoltaic modules as a source of clean energy on the vertical portion of building facades.

In "An experimental approach towards cost benefit analysis of 850kW solar PV plant", Kumar, Bukya, Shankar, Garg and Gowtham consider how solar photovoltaic cell technology can generate renewable power and reduce reliance on non-renewable energy sources. Their study focuses on Manipal University Jaipur (MUJ), situated in Jaipur, Rajasthan, a solar energy hotspot. They describe a performance assessment of 850 kW installed capacity on a hostel building-mounted solar photovoltaic power plant aimed at obtaining better designing, operation, and maintenance characteristics of the system. They also conduct cost-benefit analysis of 850 kW solar power plants, considering the impacts of various economic parameters.

Understanding human behaviours and developing strategies for promoting behavioural change is another key aspect of envisaging a sustainable world. In "The role of place attachment in defining a relationship between green awareness and conservation commitment and environmental responsible behaviour of university students in India", Javed and Kour examine the role of place attachment in defining the relationship between Green Awareness, Conservation Commitment, and Environmental Responsible Behaviour. Through data collected from the top ten awarded universities in the field of following green and sustainable practices by the government of India, they show how green awareness among students can positively influence their conservation commitment, leading to adopting environmental responsible behaviour, while place attachment moderates the overall relationship.

Transportation accounts for about a quarter of global CO2 emissions and this means that changing behaviours to envisage and promote sustainable transportation has come to be seen as a fundamental goal. In "What drives consumers' sustainable mobility behaviour? An empirical investigation of Delhi consumers", Garg, Kumar and Mittal explore motives and obstacles towards a cleaner, safer, and affordable mobility system. Their study incorporates additional variables (environmental knowledge, government actions, personal norms, and product attributes) into the extended Theory of Planned Behaviour. Through collecting data from a sample of 440 Indian consumers, they demonstrate a significant positive impact of the product attributes, perceived behavioural control, attitude, environmental knowledge, and personal norms on the behavioural intentions of consumers to adopt sustainable mobility behaviour, while social norms and government actions are not found to affect the consumer's sustainable mobility

intentions. They also suggest a mix of strategies that can be taken into consideration by producers, marketers, and policymakers to encourage the consumers' sustainable mobility behaviour.

In "Bibliometric analysis of the transformation in air logistics operations in terms of digitalization and sustainability", Yavas and Ozkan-Ozen consider how air logistics processes can incorporate technologies and applications enabled by digitalization in terms of environmental, social, and economic sustainability impacts. Through conducting a literature review and a bibliometric analysis using VosViewer software, they propose five potential research areas for developing the field. Their study aims to contribute to digital and sustainable air logistics research by identifying current trends, revealing gaps in knowledge, and envisaging future research directions.

The relationship between human consumption patterns and the use of residues deriving from food production processes has become a central aspect of circular economy visions and policies for sustainability. In "Evaluation of the physical properties of banana pseudostem for textile application" Delgado Moreira, Vidal Zambrano, and Delgado Villafuerte examine banana cultivation residues and evaluate the physical properties of banana pseudostem for textile application. In their study, three banana species were subjected to treatments following steps of cutting, cleaning and transport of the pseudostem, and extraction, combing, drying and storage of the fibre obtained. Costs of production of the artisanal extraction of banana fibre were calculated. The authors conclude that the fibre obtained from the species studied has appropriate physical properties and costs for sustainable textile application.

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