

Green Hearts and Minds: A Call for Artists & Scientists

If the NEB (New European Bauhaus) is to support the European Green Deal, renovating and designing green buildings and cities will not be enough. We also need a cultural shift that leads to sustainable lifestyles.

“Everyone thinks of changing the world, but no one thinks of changing himself” may be a fitting observation of our time. But it is not new. It was made by the artist Leo Tolstoy in 1900. Today, this phenomenon is termed the Knowledge-to-Action Gap and frequently used in relation to sustainable development. An artist did not coin it, but, as shown here, it is artists who are equipped to address it.

We have accumulated a mountain of knowledge thanks to science. The international community of scientists, policy advisors, and UN bodies has worked tirelessly to craft commitments signed by all nations’ leaders to transition to a more sustainable world and hold the increase in the global average temperature to well below 2°C above pre-industrial levels. Policymakers in Europe have worked unrelentingly to translate these commitments for our continent into the European Green Deal. Climate action requires far-reaching structural change and tremendous levels of investment. But science, technology, and new business models alone will not bring about the sustainability transformation. It will also require a cultural shift. A cultural shift is a shift in perception and attitude that leads to a change in public opinion on a large scale, which results in a change in behavior. The European Commission is taking the lead in designing a cultural project to support the European Green Deal implementation. And so here we are, designing the New European Bauhaus.

TURNING LINES INTO CIRCLES

Concrete ideas are spreading in terms of how we might renovate buildings to reduce CO2 emissions and how we might create sustainable cities. Also, conceptual ideas are spreading relating to how we might engage in a process where the economy -long

thought linear- becomes circular; energy becomes renewable, waste recycled, transportation turned into a flow. Here I would like to propose another circular concept: science and art become one entity, like yin-yang, connecting reason and emotion to create a holistic understanding that transforms knowledge generated by scientific insight into understanding and inspires action toward sustainable lifestyles.

TWO PILLARS: MATERIAL AND COGNITIVE TRANSFORMATION

There are two sides to the coin of implementing the sustainability transformation and its European translation, the European Green Deal. As frequently pointed out, [buildings and infrastructures are responsible for at least 40% of all greenhouse gas emissions](#). Bringing together architects, designers, and engineers under the European Bauhaus to renovate existing and design future buildings and infrastructure is hugely important. Yet, building the Bauhaus on one pillar - that is, focusing on the material side of the sustainability transformation - will not be enough. We also need to embrace sustainable lifestyles, which is why a cultural shift, a collective cognitive transformation, is essential.

Tackling the cultural shift brings up questions such as: How can we question beliefs, values, and identities by offering new perspectives as a first step to rethink our institutions, technologies, and relationship to the natural world? How can we embrace complexity and nonlinear thinking? How can we create a greater awareness of non-rational experiences that deepen our understanding of the challenges we face? How can we propose different scenarios and a vision of the future that spark the imagination and can lead to strategies that foster transformative societal change?

Who would be best equipped to tackle these questions? For thousands of years, the performing arts have helped create social solidarity and spur progress¹. Working together with scientists, performing artists can uncover ethical implications of scientific findings that can transform knowledge into understanding and inspire action.

¹ See e.g. McNeill (1995), *Keeping Together in Time*; establishes how the muscular and rhythmic dimension of human nature, both practiced and observed, has been a powerful tool in shaping social solidarity and spurring progress.

IMAGINE

Imagine theater plays that wrestle with facts about climate change, demographic development, and biodiversity loss to highlight how these issues impact individuals and communities. Imagine a new format for public discussion fusing artistic performance, traditional debate, and audience engagement. Imagine scientific theories such as game theory or the mechanisms of cooperation being translated into dance and connected to the problem of resource depletion so that people could see these theories in action and how their actions today will impact future generations. Imagine the data on temperature rise being turned into music to make it audible and felt. Imagine an app being developed so choirs could sing it all over Europe. Imagine ethical dilemmas, such as the implications of policy on migration being turned into participatory theater games that involve citizens in a solution-finding process. The good news is: all of this already exists. From 2015 - 2020 the [Science & Art project at IIASA](#) has engaged dozens of artists and scientists to figure out how they could work together to support cultural shifts toward sustainability.

This work has been presented as plenary sessions, for instance, at the World Science Forum, the International Conference on Sustainable Development, and the European Forum Alpbach and performance venues such as Carnegie Hall and Harvard University's Farkas Hall. The process of creating these works has yielded a framework and methodology for artists and scientists to work together. Simultaneously appealing to reason and emotion, the framework is designed to create active learning experiences that help us understand the complexity of and ethical dilemmas inherent to the challenges we face, question deeply held beliefs, inspire better-informed decision-making, and generate new solutions.

MOVING FORWARD

How can we move forward from here? How can we strengthen cultural shifts through the New European Bauhaus? The good news is: The know-how is there. Artists are ready

to engage. Arts organizations that could distribute this work are already connected to the European Commission through the Creative Europe program. There is only one link missing: We need a space where performing and visual artists can come together, familiarize themselves with the framework that enables effective sci-art collaboration, connect with scientists and create work.

By providing this missing link, the NEB would “[build the bridge between science & technology and art & culture](#)” and “[bring the European Green Deal closer to people's minds](#),” as outlined by President von der Leyen in October. The current decade is a make-or-break moment for our planet. We need sci-art collaboration as we need all the tools we have in the crucial years ahead.

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