



ESSH

ENVIRONMENTAL
SOCIAL SCIENCES
AND HUMANITIES



BUILDING BRIDGES: ENGAGING THE ENVIRONMENTAL SOCIAL SCIENCES AND HUMANITIES

Social and environmental challenges are deeply interwoven. Responding to overlapping concerns about climate change, biodiversity loss and inequality is not merely a scientific or technical enterprise, but also a deeply political, economic, moral and social endeavour.

Generating fair and effective responses requires a bridging and blending of different academic disciplines. This page outlines some recent work aiming to enhance such interdisciplinary work and lay the foundations for more effective collaborative communities, particularly focussing on the contributions of Environmental Social Sciences and Humanities (ESSH).

One of the central messages emerging from this work was that people are at the heart of collaborative communities and the building relationships is a fundamental component of interdisciplinary research. There are already good examples of such work from across the university, but there is also considerable potential to expand the contributions of the social sciences and humanities. These are summarised and expanded on the following pages.

Community Voice Project:

The ESSH Initiative engaged in a participatory video exercise that gathered views on the opportunities and challenges of mainstreaming the humanities and social sciences in transdisciplinary environmental research. This exercise was inspired by the **Community Voice Method**, which applies documentary production techniques as a tool for public engagement.

The video included contributions from researchers across the University of Oxford and was used in the subsequent ESSH Initiative workshops to catalyse further discussion and reflection.

[Watch video](#)

Overview video: Laying foundations

This video provides an overview of key messages emerging from the recent ESSH initiative project.

[Watch video](#)



Next steps

If you want to engage more in interdisciplinary approaches to environmental solutions, you can:



Sign up to ONE events and keep an eye out for topics

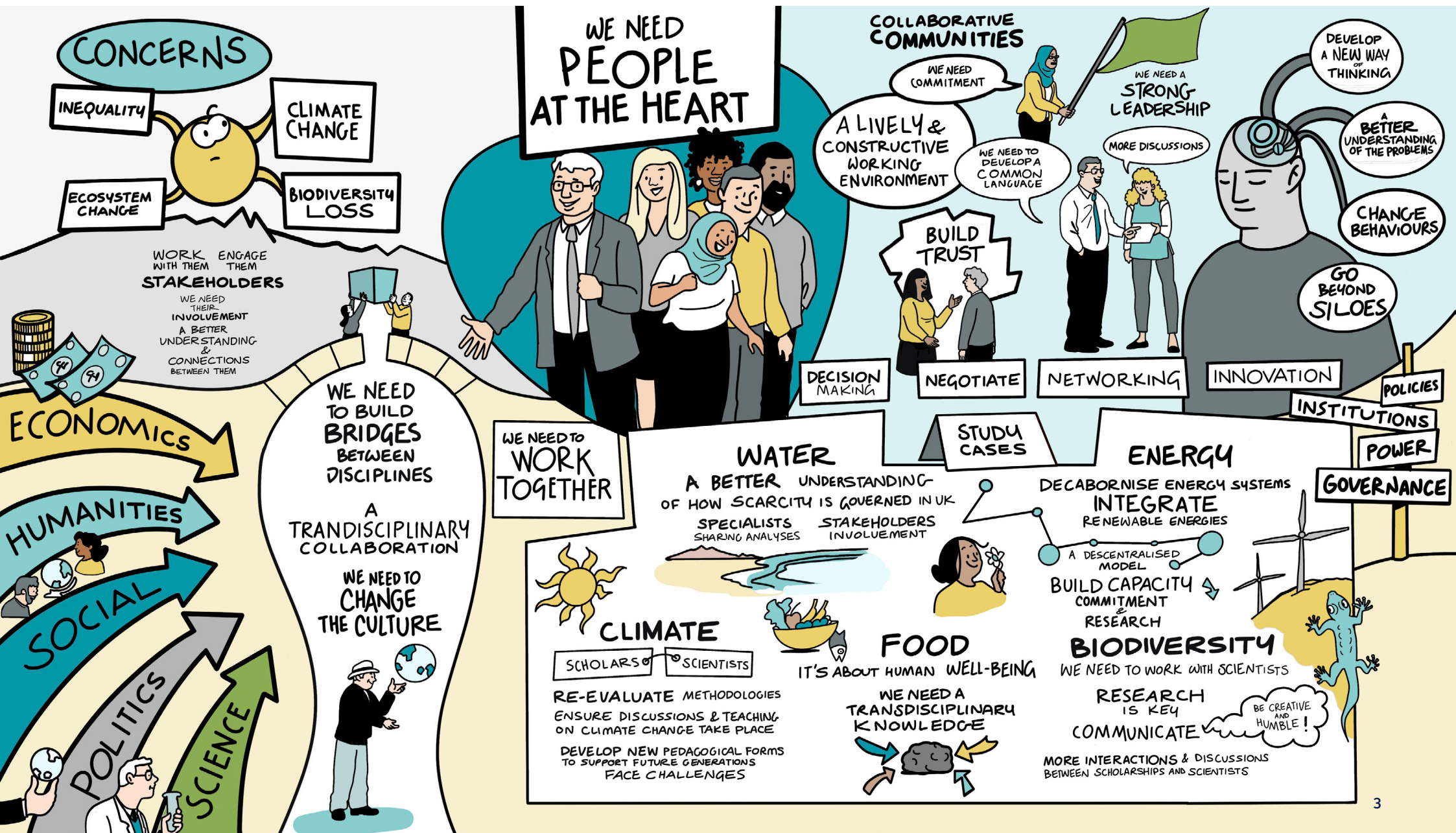


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VISUAL SUMMARY OF ESSH PROJECT



WATER NETWORK: WATER WALKS – GOVERNING WATER SCARCITY IN THE UK

This project was born out of a wider research programme on how to challenge droughts in the UK and funded by NERC. The project was mostly led by the natural sciences but contained a significant component that blended a social/humanities angle into its analytical process.

It explored how a wide array of stakeholders shape the legal, hydraulic, political-policy governance of droughts and the impacts of water scarcity in the UK. The project responded to the overarching need to understand how water scarcity is governed, but by focusing on the idea that there's a more enriching and effective transdisciplinary understanding of the problem of droughts if the key stakeholders that have influence in it are interviewed through walks along the places that suffer this phenomena.

This approach originating from anthropological and behavioural humanities traditions in academia provided researchers the opportunity to scan a rich array of analyses going beyond disciplinary siloes as the walks provided an opportunity to the interviewees (eg. engineers, researchers, water companies water resources managers, etc) to share their analyses on water scarcity blending their anecdotal accounts and memories about specific events as they were walking.

In this way, the research outcomes and findings were enriched by reflections that incurred on a wide range of sources that combined social sciences, humanities with natural sciences. A side output of these 'unsiloed' research flow of narratives is that it provided also an opportunity to build trust and a more multidimensional deeper understanding of droughts across human behavioural sciences, physical-natural sciences and social, institutional and political spheres.

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Case study provided by Kevin Grecksch,
edited by Carlos Zepeda

ENERGY NETWORK: ROLLING OUT RENEWABLES – INSIGHTS FROM THE INTEGRATE PROJECT

To address climate change, it is necessary to decarbonise energy systems – to reduce reliance on fossil fuels such as coal and gas and supply energy from renewable sources such as wind and solar.

The INTEGRATE project was initiated at the time when renewables were becoming very cost competitive, but adopting renewables is not as simple as turning off a coal-fired power station and putting in solar panels. Integrating renewables into existing energy systems requires transitioning from a centralised ‘hub and spoke’ model with energy flowing in one direction to a more decentralised model with two-way energy flows. This is a complex challenge involving a range of technical, social, economic, governance issues. The INTEGRATE project together researchers from Engineering, Economics, Energy Studies, Law and Materials Science.

A key principle was: ‘there is no such thing as a stupid question’.

Among the key ingredients for success was a willingness, from the start, to spend time to developing a common vocabulary and reflecting on the fundamental principles and core concepts.

Regular seminars were held where a key principle was: ‘there is no such thing as a stupid question’. And often much of these seminars were devoted to developing shared understandings of critical issues, such as what do we mean by energy security, or flexibility in an energy system. The project managers and co-ordinators also played a critical role in fostering a lively, creative and constructive working environment as well as building connections between different stakeholders through interpretive and translation work.

The INTEGRATE project went a long way demonstrating how the integration of renewables could work. It also spawned a number of follow-on projects to further develop work on the transdisciplinary challenge of decarbonising energy systems, partly as a result of the capacity building of staff across the project. Building such capacity takes time and commitment, but it is essential to developing research that addresses complex and multi-dimensional sustainability challenges.

Case study provided by Sarah Darby, edited by Mark Hiron

FOOD NETWORK – LESSONS IN TRANS-DISCIPLINARITY FROM THE MILLENNIUM ECOSYSTEM ASSESSMENT PROJECT

The Millennium Ecosystem Assessment (MEA) took place from 2001 to 2005 and assessed the consequences of ecosystem change for human well-being. It was the first ever assessment of the environmental changes that had taken place in the second half of the twentieth century, and of what these changes meant for the services that ecosystems provided to human wellbeing, in the form of health, food, recreation, employment and others.

The MEA was arranged according to working groups, which included not only natural and social scientists but also businesses, financial institutions, civil society actors and indigenous peoples. This was a unique feature of the MEA, in contrast to the IPCC, it involved a large variety of stakeholders beyond governments in governing and shaping the assessment.

One of the key lessons from the experience is that processes for generating transdisciplinary knowledge is as important as content. Another important lesson was the unique value of trans-disciplinary work, as opposed to inter- and multi-disciplinary work. Multi-disciplinary means simply taking some knowledge from one discipline to another. Inter-disciplinary is about taking steps to transcend disciplinary boundaries where each is contributing to one problem that a single discipline is not able to solve.

The MEA went however beyond inter-disciplinary work to become trans-disciplinary in the sense that it worked with stakeholders around a common problem. The problem is then not only understood from the perspective of different disciplines, but also from the perspective of stakeholders. Solutions do not come from a common understanding reached by different disciplines, but from a negotiation process with different stakeholders, who also bring their specific understandings to the problem.

**In sum, trans-disciplinary = expert knowledge
+ stakeholder knowledge + decision-making.**

**Any trans-disciplinary work is at the
service of decision-makers, who in the
case of ecosystems are local stakeholders.**

Case study provided by Monika Zurek,
edited by Séverine Deneulin



BIODIVERSITY NETWORK: COLLABORATING ACROSS DISCIPLINARY DIVIDES AS PART OF THE ART, BIODIVERSITY AND CLIMATE (ABC) NETWORK

In 2021, the University of Oxford's Art, Biodiversity and Climate (ABC) Network contributed to an exhibition in Paris entitled *Among the Garbage and the Flowers*. This was the culmination of a term-long collaboration between artists and scientists who were asked to critically reflect upon the imaginary divide between the urban and the wild through art. Scientists from the Oxford Networks for the Environment (ONE) and artists interested in collaborating with scientists were invited to express interest in participation, and were subsequently matched together by the facilitator.



One collaboration, for example, brought together research on woodland restoration in India, with scientific poetry, and silk screen printing. The work entitled 'The Salvage Eaters' exhibited in Paris weaves together words and images. It aims to capture the importance and novelty of the research, which it does through a poem that quietly carries scientific concepts into the visual art. The production of this work was the result of a collaboration that lasted about 6 months from inception to final presentation between a D.Phil student Trisha Gopalakrishna, an Emeritus Research Associate, Sarah Watkinson, and a visual artist Neeli Malik. They first met on a spring day at the ecological research plots in Wytham Woods and continued their collaborations through online meetings.

Participants involved in the collaboration relished the opportunity to engage in transdisciplinary collaboration. It was a chance for researchers to communicate with other parts of humanity in a more general way, rather than the highly specialised ways that scientists typically communicate. They noted that humility was a very important part of building the interaction. As one of the participants, Sarah Watkinson, noted, researchers can have a tendency to be dismissive of other people's disciplines, but found that this collaboration showed that there is so much to be gained from being very humble in one's approach to what other people do. She added:

“to communicate imaginatively across a subject divide is really very exciting.”

Case study provided by Sarah Watkinson, edited by Jasper Montana

CLIMATE NETWORK: THE CLIMATE CRISIS NETWORK

As part of its response to the intensifying global climate crisis, the University of Oxford has sought to develop new forums for environmental social sciences and humanities (ESSH) scholars to work with climate scientists and other external participants.

One such group, Climate Crisis Thinking in the Humanities and Social Sciences, formed in 2019 and hosted by TORCH (The Oxford Research Centre in the Humanities), has brought together historians, anthropologists, political scientists, geographers, philosophers and others. Its intention has been not only to enable networking and interaction, but also to generate a radical re-evaluation of academic methodologies, conceptions and agendas.



For one of the conveners, Dr Amanda Power, Associate Professor in the Department of History, the Climate Crisis network has generated discussion around key concepts that are commonly deployed, but which may have different connotations across divisional boundaries. One example she notes is the idea of “progress” as a function of modernity itself: this concept may signify one thing for those working on development as a concrete activity and another for those working on cultural critique or intellectual history. Interactions within this network have helped different scholars to parse out these subtle differences.

Working through a “crisis” that itself could not have been anticipated, in the form of the global pandemic, the Climate Crisis network has had to be innovative in the design of its events. Academic roundtables have worked well, a format that some disciplines have subsequently taken back and adopted in their own contexts. The return of in-person events has expanded

these possibilities. Last year, the network co-organised a “pop-up exhibition and panel discussion” on creative responses to the climate crisis, which was hosted at the Oxford University Museum of Natural History. This enabled academics from different disciplinary contexts to discuss how they might harness the visual arts to engage students with climate issues.

A key strand of the network’s work has been to evaluate the potential contribution of ESSH scholarship to education. How can we move towards greater integration of these issues on the curriculum, ensuring teaching and discussion on climate change takes place not just in the context of physical geography lessons, but in a wider array of learning contexts? And how might new pedagogical forms be developed through which we can support futures generations to face these increasingly complex challenges? With this in mind, the network is moving towards compiling a new “Collaborative Syllabus for Climate Crisis” in the year ahead.

The Climate Crisis network is one example of how ESSH scholars at the University are rethinking fundamental aspects of their fields, including teaching and modes of public engagement.

Case Study provided by Amanda Power, edited by Tim Howles

WORKING TOWARDS ENVIRONMENTAL SOLUTIONS

– EXPLORING THE CONTRIBUTIONS OF ESSH

The ESSH initiative project held two workshops in March 2022 exploring how to enhance interdisciplinary collaborations directed as addressing environmental challenges.

Explore the visual minutes of one of these meetings, and a synthesis of key messages is outlined right:





KEY LESSONS FROM THE PROJECT:

- Commitment to listening well and being generous in learning about other perspectives is critical to building mutual understanding and relationships
- Dialogues around specific issues is likely to precipitate exciting exchanges of ideas
- Early integration of ESSH is vital to develop deep and meaningful collaborations
- Building bridges takes time and requires commitment. Especially since the incentive structures are not generally well-aligned with the investments required.
- There is lots of potential for creativity to play exciting and interesting role in building bridges

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