SPACE4CLIMATE

The making of a network revealed –matchmaking with purpose pre, during and post Covid19

"I looked him up. He appears to be a knowledge broker. So he'a three eye raven? See lots of things but doesn't actually do anything himself?"

Space4Climate group member

Image Credit: JAXA JMA , Proud, S. University of Oxford

SPACE4CLIMATE

Uniting UK space-enabled climate expertise and services

Who we are

Chaired by the UK Space Agency, Space4Climate spans government, industry and academia, uniting those with expertise in the development of satellites, analysis and exploitation of data they gather, and production of quality assured global data and climate services.

About us

Trusted services

Our mission is to ensure a seamless supply of trusted climate intelligence from space so that the UK offers a thriving, supportive environment for the development of quality assured products and services enabling climate-smart decisions, disclosures and climate-sensitive planning.

Climate showcase

What we do

We connect UK producers and global users of trusted Earth observation data and actionable space-enabled climate analytics and services. We respond rapidly to emerging needs and develop new opportunities and collaborations. Discover more about our membership activities.

Our work

Supported by:

CGI

gmv
INNOVATING SOLUTIONS

National Centre for Earth Observation
NATURAL ENVIRONMENT RESEARCH COUNCIL

TELESPAZIO
a LEONARDO and THALES company

UK SPACE AGENCY

www.space4climate.com   **@space4climate**

VALUE FUNDERS SEE (POSSIBLY)

Funders fund the coordination and knowledge brokering activity of the Space4Climate group through our Climate Services Development Manager. This identifies the needs of potential users of space enabled data and services and enables us, through our task groups and collective activities, to share with them the corresponding capabilities of our world leading scientists and suppliers.

UKSA

It opens up new pathways to help UKSA realise the UK's ambition to increase market share to 10% of the £400 billion global space economy market by 2030. Community on tap to rapidly consult for policy development, decisions, responses and monitoring health of sector.

Academia

Helps us achieve impact with what we've found and helps us link up with new end users to understand new data and capability they require and critical knowledge gaps and needs + knowledge of funding pots + reinforced voice into Defra, BEIS, UKSA, NERC

Industry

Client leads generated, prospective clients' service/data needs understood, ability to be linked with academia, to hear and to feed into government space and climate agendas, have credibility bolstered by being part of the network

UNDER MY WATCH

What we do

Space4Climate builds links between stakeholders along the entire climate data supply chain, from raw satellite data to end user products, bringing together experts in data, infrastructure, science and applications.

» **Influencing the development of the UK's key infrastructure assets,** to meet the particular requirements of exploiting climate data from space

» **Supporting UK organisations competing for funding for projects involving climate data,** including the Copernicus Climate Change Service where UK organisations secured funding worth more than €10m

» **Achieving a clear representation of UK priorities in the ESA Climate Change Initiative** through consultations across the UK climate data community

» **Establishing community priorities to steer large funding programmes** such as the European Commission's Horizon 2020 programme, and the UK science investment strategy...plus community position papers, demonstration services and requirements gathering, market analysis, coordinated sectoral engagement and more.

"There is no other forum with all the seamless supply chain stakeholders around the same table"

SPACE4CLIMATE

Climate data from space

» **Do you need to monitor the environmental impact of infrastructure development?**

» **Assess the viability of a new site for renewable energy generation?**

» **Update the risk of storm damage for the coming season?**

If so, you will need to compare environmental data collected at different times, and you will want to be sure that differences are coming from real environmental variability and not changes in the equipment or system used to make the measurements.

"Climate data from space" are any Earth Observation-based environmental data records with this level of consistency, allowing you to compare measurements made months, years or even decades apart.

Space data for climate services

The development and implementation of a seamless supply chain will open the door to more efficient and robust science and enable sustained and routine climate services.

Specific case studies explored by Space4Climate demonstrate that climate data from space can:

» **Enable UK satellite data scientists to participate in prestige international activities** such as the Assessment Reports for the UN's Intergovernmental Panel on Climate Change

» **Accelerate the development of higher quality seasonal forecasts**

» **Position UK organisations to become suppliers to the Copernicus Climate Change Service,** providing long-term sustainability

» **Open up opportunities for commercial services** using very high quality data sets from the (recent) past to make decisions about the future

Join the Space4Climate network

Be part of our informal network, working to improve the flow of climate data from space to benefit UK businesses and organisations.

Website: www.the-iea.org/space4climate/
Email: s4c@the-iea.org

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Our work

Community ⟶ **Network of excellence**
(retaining community functioning but with much stronger knowledge and capability brokerage function)

OUR ASSETS

PHYSICAL

- Our governance document, funding agreement, membership MoUs

- Money in a pot in UoR

- Our website

- A library of assets held and maintained by the Pufferfish team

- Demonstrators

- Event outputs

- Files, documents and branding materials

- A banner and other printed assets

STAFF

- 1 X 0.2-0.8 FTE Coordinator/Director

- March 2020 onwards

  - 0.1 FTE financial administrator

  - 0.2 FTE PR&Comms

  - 0.1 Website development

  - 3 months 0.4 CTO

  - 0.1 Event coordination support

  - 0.1 Minutes & group meeting coordination

TIME AND EXPERTISE OF OTHERS

- Our members

- Our followers

- Co-founded and host two networks

  - MESH

  - AQNUK

- Our reputation

RUNNING A NETWORK
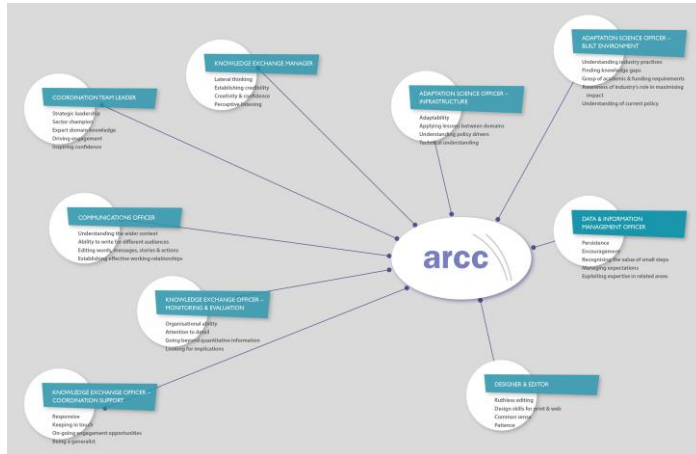
HELLO FROM A THREE EYED RAVEN

Greensight - The three-eyed raven was an ancient and immensely powerful greenseer who could perceive the past, present and future through visions and time travel with ease. He helped Bran Stark travel back in time to the past to allow him to see his father's history. He could undergo periods of greensight for seemingly unlimited periods of time without interruption from outside forces, showing his immense magical ability.

https://gameofthrones.fandom.com/wiki/Three-Eyed_Raven

- Magical abilities?

- Phenomenal perception of the past, present and future?

- Time traveller?

- Sees all but does nothing –hopefully you'll be convinced otherwise by the end of this talk!

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A BIT ABOUT ME....

- **CIBSE Resilient Cities Group Vice Chair**

- **CIBSE Knowledge Panel member**

- **Steering group member London Climate Change Partnership**

- **Indoor Air Quality Working Party Secretariat**

Last year was working part time for a government department also....

Day job:

- **Coordinate the Space4Climate group, represent us on the London Climate Change Partnership**

  www.space4climate.com

  Includes co-founding and running AQNUK and MESH

The inside story:
Health effects of indoor air quality on children and young people
Published January 2020

Royal College of Physicians   RCPCH

EFFECTIVE MATCHMAKING TAKES A BROKER NOT A WALL OR AN ALGORITHM

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MATCHMAKING TAKES A BROKER

- **WHAT YOU'RE LOOKING FOR** - Dating sites are not a one-size-fits-all deal. Some sites are intended for casual romance while others are geared toward serious relationships.

Flings & hookups → **Serious relationship**

Connecting with purpose to meet a need 'of the moment'
Might not be long-lasting but you hope good whilst it lasts
Should not be mistaken by either side for anything other than it is

Building up trust over time
Establish communication patterns - know what makes eachother tick, what interests the other person
This enables you to be able to pre-judge what you can do together that works well, is fun, what will fall flat on its face

MATCHMAKING TAKES A BROKER

- **TRUST - Most sites make it simple to block unwanted users and report inappropriate behaviour. Some sites will manually review each new profile and many offer photo verification feature to ensure members are who they say they are.**

Externals	→	Community members

Externals

Rapidly build credibility
Have to reinforce it
Only contact them with useful information
Try to make the asks beneficial to them

Community members

Some get it, proactive, respond positively

Others takes time to build up trust, need to overcome the 3-eyed raven issue –scepticism of value

Changing a small 'club' into a transparent network

MATCHMAKING TAKES A BROKER

- **PROFILE BUILDING – The longer you spend on answering questions during signup the site's matchmaking success.**

GETTING TO KNOW PEOPLE –LAG TIME UNTIL VALUE REALISED,
TAKES REVENUE NOT CAPITAL OTHERWISE YOU'D HAVE A MACHINE PRESENTING THIS!

THE MAKING OF A NETWORK

- Matchmaking takes a broker

- Coordinating matchmaking and scaling the benefit of those matches, finding patterns, similarities, linkages takes a **super broker**

- **You are mostly juggling social capital** –your asset is the valuable time of your members and those you are engaging with.

- **There is an art to consuming people's time with purpose,** making implicit that they'll get a return on their time investment.

HANDLE WITH CARE

Network success –many authors and consultants in this area will stress the informal nature of communities is crucial, to systematise them, will crush them

There is an art to curating a network, its activities, to ensure it simultaneously delivers on the drivers of the funders and its mission, but in the process you don't kill off the very 'informal' strength based on informal trust arrangements it has at its core.

WE SHOULDN'T KEEP TRYING TO SIMPLIFY WHAT IS COMPLEX….

Nor shy away from learning about our complex world, otherwise we end up with this…

- Climate change affects the social and environmental determinants of health through **essential requirements like clean air, safe drinking water, sufficient food and secure shelter.**

- One size does not fit all, need devise **contextual action based on spatial setting with time horizons in mind of activity focus**

- climate change seen as remote, abstract global problem – flagged up in terms of numbers, of degrees c global warming and carbon emissions, **far removed from the impacts on every day life of humans.**

100 Unintended consequences of policies to improve the energy efficiency of the UK housing stock C. Shrubsole, et al. (2014) https://doi.org/10.1177/1420326X14524586
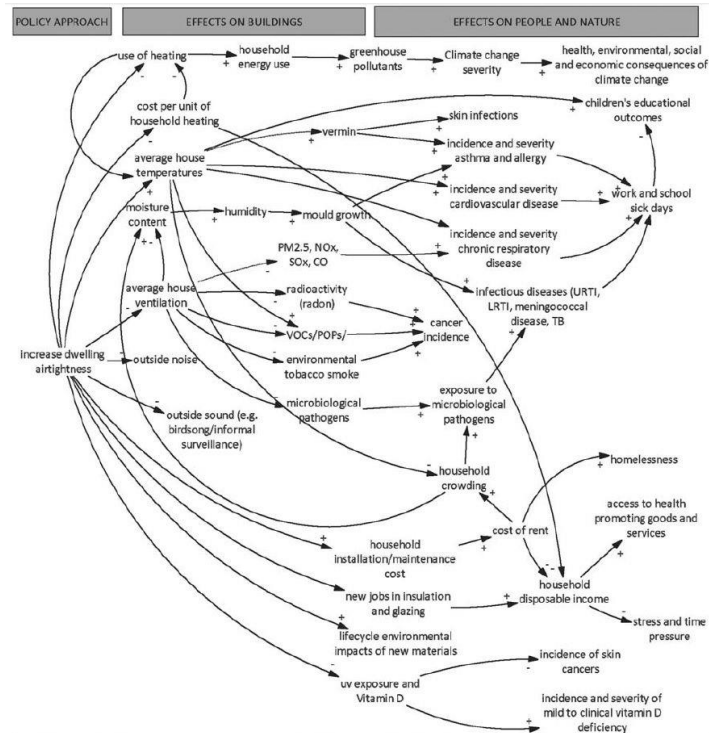
WHAT'S INHIBITING SCIENCE INFORMED ACTION?

- **Capability –very few have what is needed by many to scale –which involves failure and learning as well as shiny innovation**
- **Knowledge services vs fundamental core professional knowledge**
- **Professional responsibility**
- **Project vs programme**
- **Simplification vs complexity**
- **Fragmentation vs coordination**
- **Capital vs revenue**
- **Hero story vs learning story**
- **Reactionary vs precautionary**

CV19 RECOVERY

What we need to use more in day to day professional practice

- Be responsive

- Plan precautionary action

- Lived experience

- Care

- Compassion

- Responsibility

- Recovering from trauma

- Shadow systems

The bling words of the vision, how to relate

Low carbon transport and energy production

Green recovery

Science to inform action

Climate change –the next crisis facing humanity

~~Climate~~ **COVID** emergency

TRANSITION....
WHAT'S THE COORDINATING FORCE?

Socio-technical landscape:
Ideologies, resources, social logics

Existing Regime
Field

Regime shift

Transition Pathway

New Regime

Developmental Change

Transformational Change
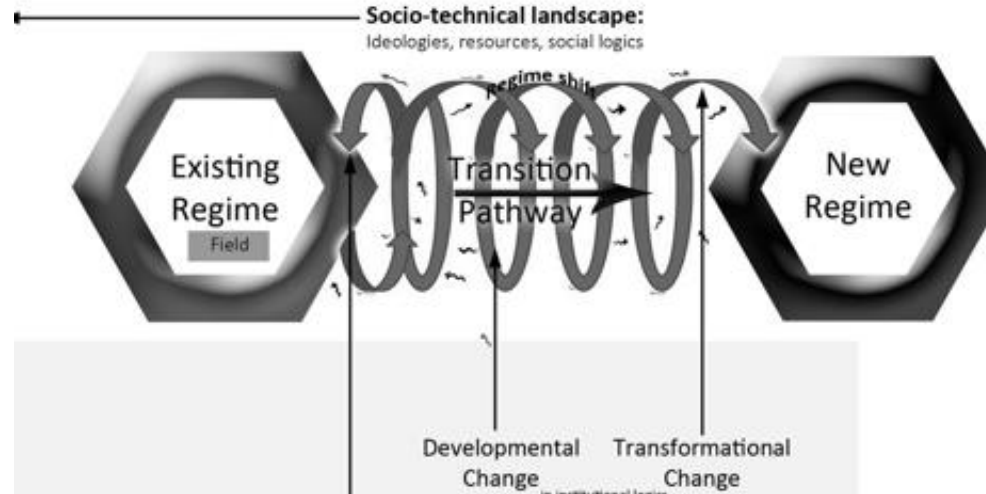
HOW TO CHANGE WHAT WE DO

IT ISN'T ENOUGH FOR ONE PERSON TO ACT…
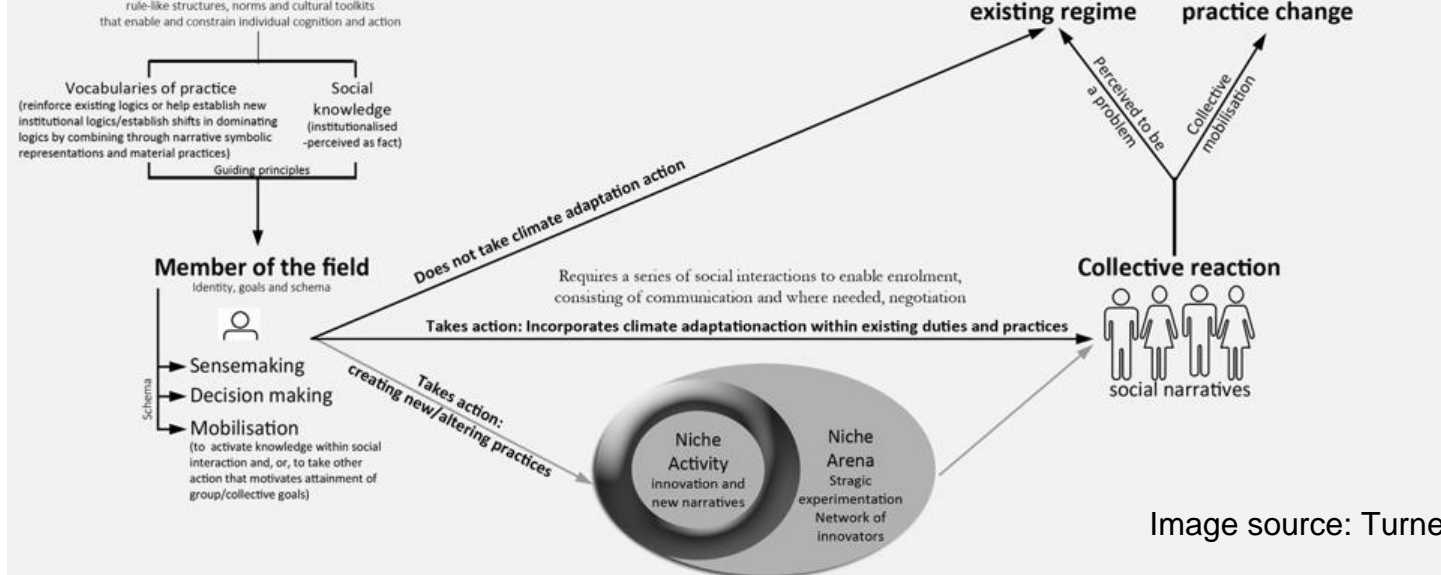
Image source: Turner, B. PhD thesis

TRANSITION….

WHAT'S THE COORDINATING FORCE?

ACROSS A SECTOR, ACROSS A CITY, ACROSS THE WORLD?

EXAMPLES OF S4C COORDINATING ACTION

Financial services – climate risk disclosure task group

Formalising world-leading capability – Competent Persons Task group

Exploiting UK CCI LST capability

PHENOMENAL PERCEPTION

3-EYED RAVEN? CAT HERDER

There's an art to cat herding, someone needs to take responsibility and coordinate the seemingly uncordinatable

NOBODY DID WHAT ANYBODYCOULD HAVE

There was an important job to be done and Everybody was sure that Somebody would do it. Anybody could have done it, but Nobody did it. Somebody got angry about that, because it was Everybody's job. Everybody thought Anybody could do it, but Nobody realized that Everybody wouldn't do it. It ended up that Everybody blamed Somebody when Nobody did what Anybody could have.

Do you think **anybody** can be an effective knowledge broker, can develop and maintain an internal community and an effective external brand and network?

Do you think 'doing' only counts if it directly delivers, rather than enables, data product or service outcome?

Is what I'm doing, nothing? pointless? and valueless?

Contact us:

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@space4climate   **www.space4climate.com**   Space4Climate