CULTIVATING CONNECTIONS

CULTIVATING CONNECTIONS IS AT THE HEART OF ACTIVITIES PLANNED BY THE ASSOCIATION FOR GEOGRAPHIC INFORMATION (AGI) FOR THE YEAR AHEAD

"With a return to face-to-face events in 2022, the UK's largest membership organisation for the geospatial sector clearly has a key role to play in connecting the geospatial community and helping it to meet the challenge of delivering data for sustainable recovery," says AGI's new Chair, Adam Burke (pictured).

"Whether through our flagship event, GeoCom, our regional or group conferences, or collaboration with our partners, AGI activities are designed to support a thriving UK Geospatial Community, actively supporting a sustainable future."

Having first joined the Association fresh out of university, Adam has first-hand experience of the benefits AGI membership brings to professionals at all stages of their career and will use this insight to deliver further value to the geocommunity.

"I've been involved with AGI for a number of years in some form or capacity," he says. "When I was new into the industry, I originally joined to expand my network and, most importantly, to be part of the geocommunity. Had it existed then, I would have loved to have been part of the Early Careers Network (ECN) which supports the future leaders of the geospatial industry. Today, anyone with less than 10 years of work experience can benefit from the connections it facilitates simply by joining the AGI as a free Network Member."

"The connections I have made since joining AGI have had a huge impact on my professional life and in the coming year, we'll be finding new ways to connect the UK geocommunity and demonstrate its contribution to post-Covid recovery, climate action and a sustainable future. This builds on the themes addressed by our flagship event, GeoCom in recent years – from geospatial's role in achieving net zero, providing a new vision of sustainability, to its place in post-pandemic recovery."

"2022 will also see AGI build on initiatives launched last year to support the growth of the UK geospatial community and to deliver value for members. This includes new additions to the online membership portal and implementing more benefits identified in its membership survey. Following the popularity of our webinars, we will also increase our online programme and digital events calendar. Check out www.agi.org.uk for the latest news."

"The last two years have seen increased recognition of the value of information about location and I look forward to working with the AGI Council and members to keep this momentum going."

Adam, who is Geospatial Lead at Natural Resources Wales, is a well-established and active member of the Association having been Chaired AGI Cymru before being elected to Council in 2020. He has a keen interest in project and change management, and as a chartered Geographer and a Fellow of the Royal Geographic Society, he enjoys the outdoors and can often be found roaming the Brecon Beacons National Park at weekends.

Adam succeeds Denise McKenzie who remains on Council.

THE ASSOCIATION FOR **GEOGRAPHIC INFORMATION**

The AGI is an independently funded and impartial organisation with over 1000 individual and organisation-level members. It works professionally and collaboratively with partners, members, and wider industry to provide thought leadership and to maximise the benefits delivered by geospatial and geographic information, as well as to promote further awareness of its potential.

Details of AGI Council, including Vice Chair Richard Duffield, Honorary Treasurer, Helen Griffiths and Honorary Secretary, Morgan Commins, can be found at https://www.agi.org.uk/council-members/

DEATH OF THE CARTOGRAPHER?

A NEW FRAMEWORK TO HELP GOVERNMENT CREATE BETTER, MORE APPROPRIATE MAPS IS IN THE OFFING. **SEPPE CASSETTARI** EXPLAINS WHY AND WHAT IT MEANS IN PRACTICE

The British Cartographic Society (of which I'm proud to be the current president) has just signed a Memorandum of Understanding with the Government Geography Profession (GGP). It covers a framework whereby the Society can provide guidance and support to those working in all parts of government to help them create better, more appropriate maps. This is the first of what we understand will be several MoUs with organisations that comprise the wider geospatial community, but the BCS is chuffed to be the first.

But why are such agreements necessary? All members of the GGP could, if they so wished, join the BCS or any other learned, professional or trade body and get the same support and advice.

The reason is more to do with the way geospatial has become a ubiquitous resource we have all embraced as part of our everyday lives. Making maps is now not solely the purview of specialists, well trained and highly skilled as they are. It is now something anyone can attempt. The tools are readily available at little or no cost, and people working in many other specialisms can generate their own maps. And many do, across government and beyond.

Not fit for purpose

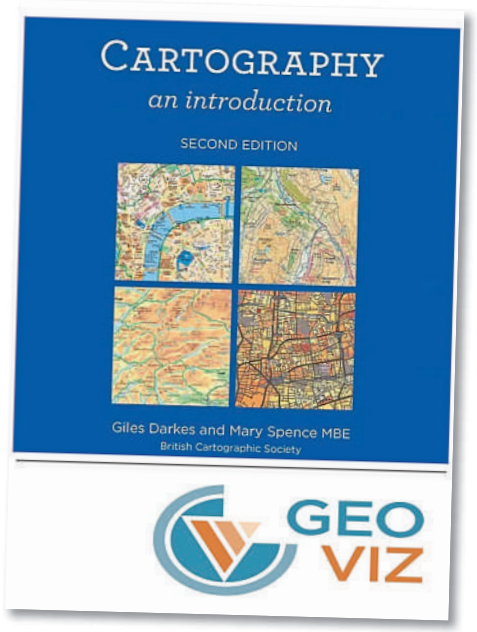
The problem is that so many of these maps are just not fit for purpose. They do not communicate the essential geographic message the author is trying to convey in a way that is easy to understand.

There are, of course, standard map layouts for colour schemes, text formatting, symbology and marginalia that can be applied to the standard maps datasets with which we are all familiar. These are fine, but often limited in their scope. Those who step outside the comfort of using a standard template need to have some knowledge of map design and how maps work at the user level. This is where support materials, short training sessions and 'how to' advice become so important.

As part of its initiative with the GGP, the BCS has also relaunched a programme it ran for a number years under the title Better Mapping. It included many face-to-face events to show map users how they could improve what they do and thereby increase the impact of the message they want the map to convey.

So this begs the question 'Is the demise of the cartographer imminent?'.

While technology confers many benefits, the underlying knowledge needed to create maps that effectively communicate their intended message is critical



The BCS publication Cartography. An Introduction provides practical support for the GeoViz programme.

As you would expect, all those in the BCS believe wholeheartedly that the answer is a resounding No.

Underlying reality

But there is an underlying reality that everyone using geospatial data faces. As a subject, it is underpinned by basic principles that have not changed for decades, but the technology is constantly re-inventing itself. Which means we create new terms, labels and names for much the same thing that existed at the start of the GIS revolution.

A GIS Technician of the 1990s is now more likely to be a Geospatial Data Analyst, or some such. The word cartography is dated in many people's eyes. It implies traditional map making, old-fashioned styles, historic records ...

But the principles of cartography have not gone away. If anything, they are now more important than ever. We just call it something else – Data Vizualisation seems to be the current buzz phrase. So the BCS has called its new programme to promote better mapping GeoViz (short for geospatial vizualisation). It seems to capture the current view that the technology allows us to be much more creative in the way we design maps. They can be dynamic, interactive, multi-dimensional. In fact, they can embrace all sorts of new and exciting formats and media.

The BCS runs awards each year for the best examples of maps from around the world. There are still many traditional map styles, which when brilliantly executed, can absolutely blow you away. But there are also many people working on great new ideas about how maps could and should look in the future. A new generation of cartographic designers (sorry, data visualization experts!).

Rise of the amateur cartographer

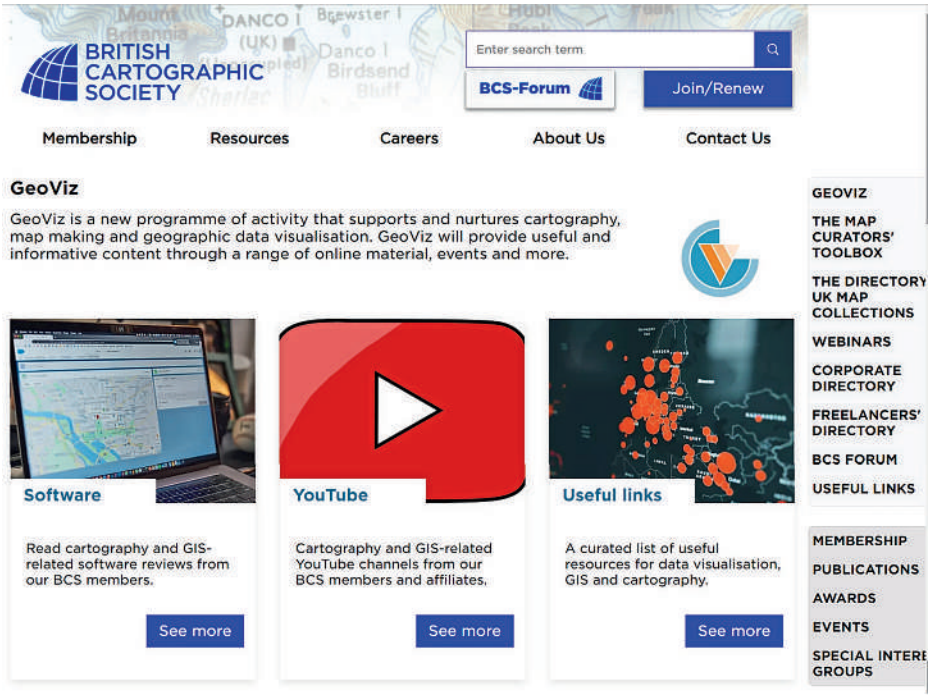
It is important that good practice underpins maps that are created both by mapping professionals and by those who are not trained in the subject. The rise of the 'amateur cartographer' has to be supported by sound advice and support.

The BCS published a book on the principles of Cartography back in 2017. It is used the world over as an introduction to the subject of how maps should be designed and is used as part of the GeoViz programme as the basis of support materials available through its various partnerships.

So, to paraphrase Mark Twain, the report of the death of the cartographer is much exaggerated. Whatever label we want to hang round our necks as a way to show off our skills, the underlying knowledge we need to make good, effective maps that communicate well with the intended user, is critical.

Cartography, again sorry, Geo Vizualisation, is not dead. It is, in fact, burgeoning as a skill set that more people want - and need - to embrace.

Dr. Seppe Cassettari is a GIS professional, with more than 25 years' experience in developing and applying geospatial technologies in the public, private and educational sectors. He was most recently CEO of The Geoinformation Group (now Verisk's Geomni UK business)



GeoViz: a new resource from the BCS that supports and nurtures cartography, map making and geographic data visualisation

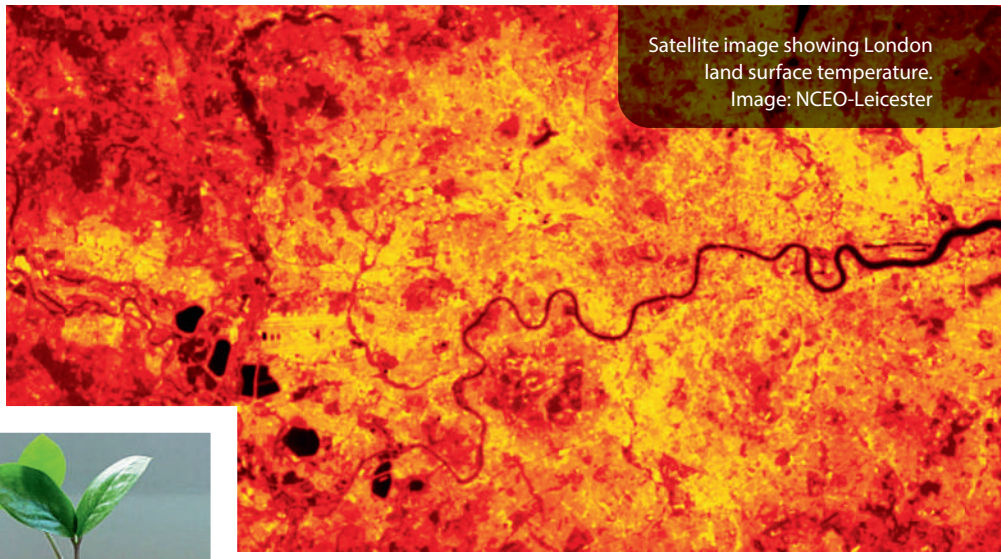
SPACE DATA HELPS TACKLE CLIMATE CHANGE

AS SCIENTISTS WARN THAT WEATHER EXTREMES WILL BECOME MORE COMMON, SATELLITE-DERIVED DATA WILL BE USED ON TWO NEW UK-LED PROJECTS TO MONITOR, UNDERSTAND AND HELP MANAGE THEIR IMPACT

The first project is a collaboration between the National Centre for Earth Observation (NCEO) and Ordnance Survey (OS), which will provide meaningful insights for policy-makers to manage the impacts of climate change in hot spots across the UK and beyond.

Using NCEO land surface temperature data derived from thermal infra-red sensors in space, OS will then help customers understand and identify how the data can be applied effectively.

The latest UK climate projections show a hot summer like 2018 is likely to occur every other year by 2050, by which time the number of heat-related deaths could more than triple from today's level in the absence of additional adaptation; from around 2,000 per year to around 7,000. As many as 1.2 billion people around the world could face heat stress conditions by 2100 if current levels of global warming continue.



Satellite image showing London land surface temperature. Image: NCEO-Leicester

CRISP builds on work by the Space4Climate (S4C) Climate Risk Disclosure task group

Insightful evidence

The Earth Observation data used in the pilot will indicate extreme events and locations that may show greater risk to human health, such as cities where heat stress is a particular concern. By providing easier and better access to insightful evidence through the pilot and through working with the Office for National Statistics, the UK public sector will be able to tackle climate change more effectively with accurate geo data from space.

Donna Lyndsay, Innovation Lead, Ordnance Survey, said: "By working collaboratively with the UK Space Agency and leading scientists, OS will use its mapping capabilities to identify areas at greatest risk from global warming using satellite data. The outcome will be to share the learnings from accessing the Earth observation data so that governments and businesses in the UK and globally, have the meaningful insights and evidence to support resilience and adaption plans in relation to the climate crisis.

Identifying risk

The second project will see Telespazio UK, in collaboration with Assimila, developing a pilot of a Climate Risk Index tool, known as CRISP. Using climate data from an ensemble of climate project models, historical reanalysis and Earth Observation data the prototype will focus on two examples – agricultural drought and wildfires – to show insurance companies how to use the data in their own assessments to benefit the finance sector.

The government's new National Space Strategy pledged to work closely with the financial sector, including identifying the risk of climate change impacts and the UK space sector is keen to lead the way in climate related risk disclosures that impact the financial sector.

CRISP builds on work by the Space4Climate (S4C) Climate Risk Disclosure task group. The S4C work provides the underlying technical capability to determine climate indices – based on consistent identification of extreme climate events and changes in sea level derived from different long-term data records of Earth Observation and climate re-analysis datasets.

Tim Peake (pictured on the right) visiting the S4C stand at COP26

Both schemes were unveiled ahead of British ESA astronaut Tim Peake's attendance at COP26, last year's UN Climate Change Conference hosted by the UK in Glasgow. Tim visited the S4C stand where he answered questions from young people and talked about how space is helping to monitor and tackle climate change.

Beth Greenaway, Head of Earth Observation and Climate at the UK Space Agency, said: "The UK is leading the way in using space to monitor, understand and tackle climate change. Both of these new projects will provide decision-makers with vital information to help deal with the effects of climate change and improve lives around the world.