



Climate Change Communication Colloquium

Wellington
Aotearoa NZ
29 November 2018

THE DAY'S AGENDA

8.30 Registration, tea & coffee

9.00 Mihi whakatau – **Alex Keeble** (NIWA) followed by a welcome and introduction by **Rhian Salmon** (Victoria University of Wellington (VUW), Deep South Challenge)

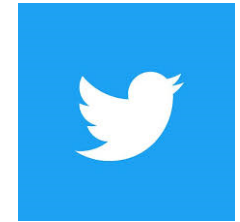
9.15 **Lightning Talks - Speaking from the heart. Chair: Rhian Salmon.** *How do we talk about our only planet?* Short presentations and discussion from practitioners: **Rebecca Priestley** (VUW, Writer), **Bruce Foster** (Artist), **Pauline Harris** (VUW, knowledge revitaliser), **Lisa McLaren** (Joint Centre for Disaster Research, Generation Zero)

9.50 Small group discussions

10am Panel 1: **Data, digital and social media. Chair: Shaun Hendy** (Te Punaha Matatini) *What's hot and what's not?*
Panellists: **Chris Knox** (NZ Herald), **Rebecca Jarvis** (AUT), **Ellen Rykers** (Journalist)

11.15 Reporting back from small group discussion

11.20 Panel 2: **Meeting in the middle - where climate stories and human stories collide. Chair: Tim Corballis** (VUW).
Panellists: **Alex Keeble** (Deep South Challenge), **James Renwick** (VUW), **Sarah-Jane O'Connor** (Science Media Centre), **Pip Adams** (Author)



After lunch

1pm Afternoon parallel sessions: **'flowers and pollinators'** collaborative activity and group discussion

Parallel 1: **Policymakers and activists** with **Lisa McLaren & Emma Lemire** (Ministry for the Environment)

Parallel 2: **Writers, artists and creatives** with **Gabby O'Connor** (NIWA/Auckland University) & **Tim Corballis**

Parallel 3: **Academics and researchers** with **Emma Hudson-Doyle** (Joint Centre Disaster Research, Massey University) & **Pauline Harris** (VUW)

2.40 Where to next?

General group discussion, formal close, followed by afternoon tea and networking



James Renwick
@CubaRaglanGuy

Buzzy feeling as we get under way with the [@DeepSouth_NZ](#) [#CommunicatingClimate](#) colloquium [@VicUniWgtn](#) - lots of familiar faces!



#communicatingclimate

@DeepSouth_NZ

Welcome

HAE RE
MAI!

COLLOQUIUM on COMMUNICATION

about

CLIMATE

CHANGE

29 November 2018

National
SCIENCE
Challenges

THE DEEP SOUTH
Te Kōmata o Te Tonga

@Graphicscribe



Nau mai, haere mai, kia ora koutou katoa

We held our colloquium in Te Toki a Rata, the beautiful new biological studies building at Victoria University's Kelburn Campus in Wellington. We acknowledge Taranaki Whānui and Ngāti Toa Rangatira, on whose land we gathered.

Our guiding whakataukī for our colloquium and for communicating climate more broadly is

He waka eke noa...

...we are all in this waka together



Deep South Challenge ... 29 Nov 2018

Hugely exciting to be in a room with so many great thinkers and doers, for our [#communicatingclimate](#) hui!



Dr Rebecca Priestley
@RKPriestley

Caffeinating in preparation for today's [@DeepSouth_NZ](#) climate change communication colloquium. I'll be "speaking from the heart" in the opening session with Pauline Harris, Bruce Foster and Lisa Maclaren



Welcome

Introduction from Rhian Salmon, Victoria University of Wellington, who is overseeing capacity building in climate change communication within and on behalf of the Deep South National Science Challenge.

This event is part of a larger research project focussed on building the capacity and capability of scientists, policy makers and other knowledge brokers in engagement about climate change and therefore improving the decision-making ability of New Zealanders in relation to climate-related issues.

Our hope for the day is to draw on the collective knowledge and expertise of the people present in order to develop new narratives and framing for better communication about the drivers, impacts and possibilities for adaptation. There is a need for new communication tools, methods, and engagement approaches with fresh stories and angles. For most people in this room, this is not just our day job – it's something we care about; the motivation and drive is not from a pay cheque, it's personal.

In designing today, we paid close attention to your registration responses. A lot of people felt that in their work they were 'preaching to the converted' and wanted to broaden their reach. Others really wanted a better grip of new digital communication opportunities that they should maybe explore, and almost everyone was interested in framing or narrative - i.e. exploring whether there are new ways to tell this story. So, we designed the first half of the day around those themes.

For the second half of the day, we will experiment a little, we will divide ourselves around three different practises or disciplines - artists, writers and practitioners; researchers and academics; and policy makers and advocates. These groups will consider their strengths and what they need to move the conversation on, and most importantly what they need from the other sectors. The groups will then interact with representatives of the other practises or disciplines. It's an activity to see how these groups can better support and learn from each other - we hope this event enables new foundations for collaboration. At the end, we'll have a chance to come together and talk about what came out of the day and what, if anything, we might like to see this grow in to.

Rhian Salmon



Matt Plummer
@matty_plumski

. @rhiansalmon kicking off a full-house colloquium on climate change communication
[#CommunicatingClimate](#)
[#DeepSouth_NZ](#)



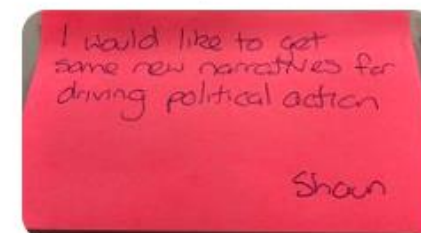
Fleur Templeton @temp... 29 Nov 2018
Looking forward to joining in for part of today's colloquium on [#communicatingclimate](#) @rhiansalmon



💬 ↻ ❤️ 2 ... ✕ ↗



Shaun Hendy @hendysh 29 Nov 2018
Kicking off at the @DeepSouth_NZ [#CommunicatingClimate](#) workshop with a round of post-it notes



💬 ↻ 4 ❤️ 18 ... ✕ ↗

SPEAKING FROM THE HEART: HOW DO WE TALK ABOUT OUR ONLY PLANET?

Lightning talks and perspectives from practitioners in the field

Rebecca Priestley writer, academic

Rebecca Priestley is a New Zealand academic, science historian and writer. She is Associate Professor and Director of the Centre for Science in Society at Victoria University of Wellington. Rebecca was asked to talk about climate change 'from the heart'. Increasingly, she said when talking about climate change, it is becoming harder to talk about it any other way. It is personal.

Rebecca first learned about climate change here at Victoria University when she was studying physical geography. For one of Rebecca's early career freelancing jobs, she was contracted to produce a literature review in response to an early climate change report and to formulate an appropriate New Zealand response to the so called accelerated global warming scenarios. She became more aware of the issues and worried about the high-level inaction on the matter. Rebecca started a file that she still has collecting newspaper articles with drastic and headlines. That was 1990. From 2005, Rebecca wrote hundreds of articles, about science, for the Listener. Thirty of these were about climate change, or low-carbon energy sources. These articles were journalistic in approach, and not from the heart. Climate Change became so important to Rebecca, that it was all she wanted to write about. She became disheartened as it felt that none of her efforts were helping, and she often felt as though she was preaching to the converted. She felt as though she was not being honest, she was holding back and no longer objective. She knew that our businesses and government were not doing enough around climate issues.

Rebecca spoke about the anxiety she feels around climate change issues, and how that has influenced her. Her latest writing humanises the scientists who are working in this area, how their professional life and knowledge influences their lifestyle changes, such as moving to a plant-based diet or purchasing electric vehicles, or how they vote.

In August 2017 Bill English flippantly said on Radio New Zealand, "no one wakes in the morning thinking about climate change." Well, Bill, yes, they do! Maybe Bill doesn't, but for many of us, climate change is a part of our everyday thinking and actions. Rebecca said "Worrying about climate change takes up a lot of my thinking space. We will adapt, but it's the social fallout that matters – climate change will bring conflict, a scramble for resources, mental health issues. It's essential that we don't feel fatalistic about it – and ensure, for our mental wellbeing, that we foster optimism. It's important to focus on and build family, place, culture, community.

Find out more about Rebecca's work at VUW here www.victoria.ac.nz/science/about/staff/rebecca-priestley



#communicatingclimate Kicking off @Deepsouth Climate science communication colloquium. Rebecca Priestley reflections on why and how climate change is important to her work. Optimism, connectedness to place culture and community



SPEAKING from the 

REBECCA PRIESTLEY Writer

HEART EARTH

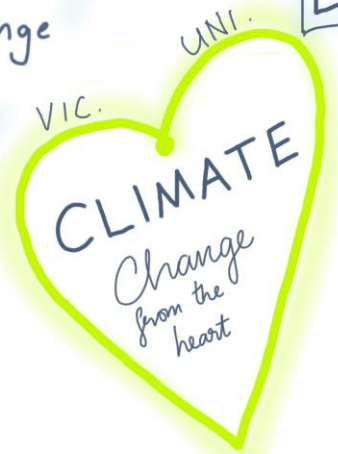
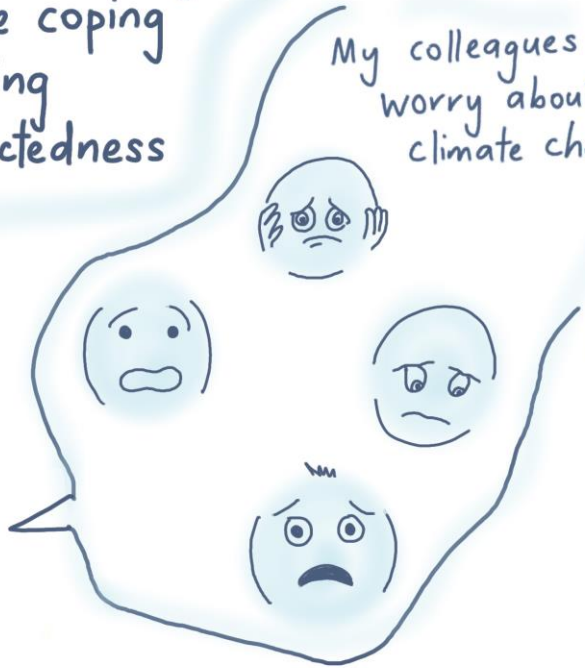


If not now
WHEN?
1990

The Listener
As a Journalist
writing about Climate
Change I had to
remain objective

We have to believe
we can make changes

- active coping
- meaning
- connectedness



Lisa McLaren Generation Zero, researcher

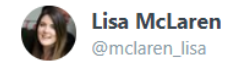
By day, Lisa is a PhD student at the Joint Centre for Disaster Research (GNS Science and Massey University). Her research looks at the potential for citizen science to build community resilience to high-impact weather and sea-level rise hazards in coastal communities.

By night Lisa is an activist as the national convenor of Zero Carbon Act. She shared the brief history of this work in a poem.

Lisa shared with us the lessons she has learned so far, and what a small team and hundreds of volunteers can achieve:

- Keep your policy to a minimum - Keep It Simple Stupid (KISS)
- Messages need to be positive and solutions focussed
- Modelled on the UK equivalent, their focus was simple: “Net zero by 2050”
- Important in the New Zealand context to “decolonise your comms” – if you don’t know what this means, find out
- Serious need to “put your ego aside and pull on your collaboration pants”.
- Find out who might kick up a fuss about your message and talk to them first. You can front foot that issue and get ahead of that tension (i.e. Young Nats)
- Always remember that you are communicating values. While our tangible mission is to change a law, it is a means to an end, and the end (a better future) is what we are ‘selling’
- Choose good words that include people i.e. pollution (easily understood) vs emissions (a bit academic)
- Ensure your science is on point
- Get out of your bubble or you will talk at the same people repeatedly
 - o Our bubble was young/urban so one strategy for us was to go to via bike to small communities
 - o Use social media
 - o Youth voice / memes
- Humanise the interaction – tell your own story, place yourself in the context, i.e. I’m a farmer....

You can read more about Lisa here www.nzgeo.com/stories/the-foreseeable-future



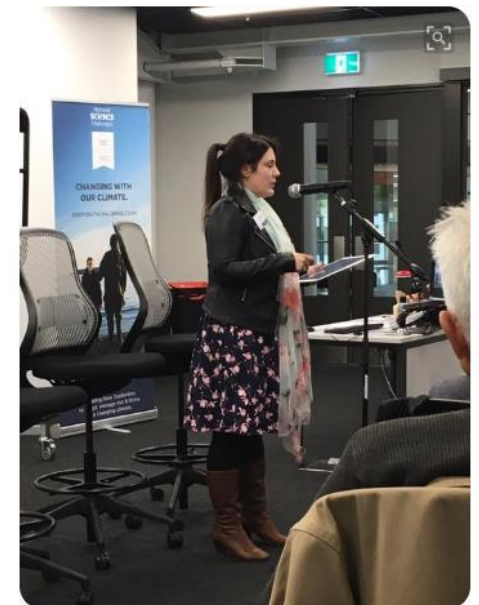
Lisa McLaren
@mclaren_lisa

Presented at the Climate Change Communication Colloquium run by the Deep South Challenge yesterday in Wellington (apparently with my eyes shut!) Looking forward to seeing what comes out of #COP24 over the next few weeks in the comms space.

[#climatechange](#)
[#communicatingclimate](#)



‘Get out of your bubble!’
[@mclaren_lisa](#) on
[#CommunicatingClimate](#)



SPEAKING from the



LISA M^cLAREN

GenZero



By day... I'm a RESEARCHER
By night... I'm an ACTIVIST



= THE ZERO CARBON ACT =

- ☆ An independent commission to advise on carbon budgets
- ☆ Net zero emissions by 2050
- ☆ Stay below 2 degrees warming

social media works - use it



We gained a reach of over 52,000!

Use local channels of communication

Keep Policies Brief

COMMUNICATE

VALUES +

VISION

OUR ADVICE
K.I.S.S.



GenZero VOLUNTEERS



#Zero Carbon Act

Bruce Foster artist, visionary

From his website: Bruce Foster is a graduate of Elam School of Fine Arts. He has exhibited widely and has work in many public collections. Bruce lives in Wellington, New Zealand.

In 2011, Bruce was one of nine artists on the 'Kermadec Project: Lines Across the Ocean', an initiative to articulate the issues facing one of the few pristine ocean sites left on the planet. This work has been exhibited in the Pacific; Tonga, Rapa Nui (Easter Island) and Noumea, in Santiago, Chile, and extensively around New Zealand. His primary contributions were the series, 'Invasive species' and 'Mapping the Pacific'.

It is very difficult to capture the message of an artist when the power of the message is in the imagery, but Bruce's passion for the topic, and the power of art to communicate difficult concepts, shone through. The Kermadec Project group visited Raoul Island, midway between Auckland and Tonga. They were shocked by how much rubbish, oceanic plastic and debris had washed up onto the shores of Rapa Nui. The Kermadec ocean and environment project was hugely inspirational for the group who travelled there and seeded a huge output on their return. The intention of this artwork was to raise public consciousness about the Kermadec area, the importance of its ecosystems, and need for protection.

Bruce himself was taken with how many [left] shoes he photographed and embarked on his own science experiment involving the release of pink jandals in southerly and northerly wind conditions to follow their path. During this work, he became very thoughtful about the harbour life in pre-euro times.


 **Matt Plummer** @matty_... 29 Nov 2018
Great to see artists and writers along side the science communicators (not to suggest these are mutually exclusive roles!)
[#communicatingclimate](#)
[#DeepSouth_NZ](#)















  2  2  

Bruce's current work is a fresh water project, and he continues to be a crusader for climate issues, including climate refugees & rolling back dairy impacts in NZ

Some of Bruce's work is captured here <http://www.brucefoster.nz/>

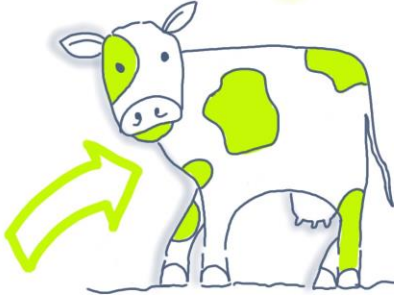
 **Dr Rebecca Jarvis** @reb... 29 Nov 2018
Up next, Bruce Foster on several [#scicomm](#) [#sciart](#) projects he has worked on - raising public consciousness through art [#communicatingclimate](#) [#scicomm](#)

 **Dr Rebecca Jarvis** @reb... 29 Nov 2018
Everywhere Bruce went he would look for jandals on the coast. So he started a project on how plastic pollution was starting to appear at archaeological heritage sites - our past and present human footprints - [#communicatingclimate](#) [#scicomm](#)
  1  3  

 **Dr Rebecca Jarvis** @reb... 29 Nov 2018
Why were the left footed sandals turning up without the right ones? Did the left jandals drift into the centre of the ocean gyre and the rights ones spin off? Is there a beach out there where only right footed jandals washed ashore? - Foster [#communicatingclimate](#) [#scicomm](#)
   3  


SPEAKING from the BRUCE FOSTER Artist

DAIRY + CLIMATE REFUGEES - FOCUS ON THESE




What about the next generations?

Photo Captions



HMNZS OTAGO

Nov. 2011
9 Artists travelled to the Kermadecs



THE WATER PROJECT

on show at Ashburton Gallery

13 Artists' response to the complex realities of water in the (21)

RAOUL ISLAND

I found 9 left feet!



As a result we have exhibited in 11 Art Galleries including NZ, Chile + Rapanui.

Where do all the right hand jandals go?!



SPORT PLASTICS

Now I'm always on the lookout!

SPORT

AT Lyall Bay I've liberated some right handers!

BEACH COMBING

Pauline Harris lecturer, mātauranga Māori revitaliser

Pauline is a lecturer at the Centre for Science in Society at VUW. She is a physicist by training, and her passion is now the revitalisation of Māori knowledge systems. Pauline's focus on revitalisation of knowledge is driven by her schooling experiences. She remembers, "we were taught one to 10 in Te Reo at primary school and the children's song, *Oma Rapiti* (that's *Run Rabbit* in English) and that's it. That's just not good enough!"

Pauline's research aims to regrow Māori knowledge and to make it a living, thriving body of knowledge. She currently leads a Marsden research project looking at the effect of climate change on traditional Māori calendars. The revitalisation of Māori knowledge is so broad, there is such a large body of knowledge that needs rejuvenating, Pauline has to engage across multiple disciplines which are often out of her area of expertise. She often has to carry the knowledge of others or stand in proxy for other disciplines. She commented, "We often have to be **the** voice". It is important to understand and give a voice to indigenous environmental and ecological knowledge. Indigenous peoples (i.e. Inuit, Māori, Samoan, Hawaiian) have been observing, utilising and honouring the environment for thousands of years. These observations when compared can give us significant insight into possible climate change effects. Her research asks if knowledge holders have noticed these changes over the last few decades. Our goal is to identify, understand and preserve that knowledge in order to help mitigate the negative effects of climate change for the wellbeing of the people and the environment.

Pauline is a founding member and chairperson for the Society of Māori Astronomy Research and Traditions (SMART) that brings together experts and practitioners to preserve and revitalise mātauranga Māori. The diverse group is made up of astronomy experts, academics and master carvers and navigators. SMART works with iwi to regrow their knowledge and expertise. Astronomical knowledge is crucial for Māori as it connects to the forest, oceans, winds, air and seas. It is an intensely holistic perspective – everything is connected and interwoven. There are stars that are associated with seasons and the flowering, ripening of plants, and also the migration of fish. Māori knowledge of the environment, seasons and time give important insights into how and if the environment and ecology are changing and whether it's due to climate, pollution or human encroachment.

Pauline is also involved in designing and implementing education programs that have a mātauranga Māori science focus. These programs aim to create many pathways into science for more Māori young people. Among them is a travelling planetarium that creates a unique experience for young people to talk about the stars, waka voyages and navigation, climate change or biology, such as which plant species we are interested in in this context. All this work is part of a decolonisation process of our knowledge so that Māori knowledge can thrive.

Pauline's VUW profile is here <https://www.victoria.ac.nz/science/about/staff/pauline-harris> and SMART is here <https://www.Māoriastronomy.co.nz/>



Deep South Challenge ... 29 Nov 2018

Dr Pauline Harris talking of the huge task of revitalising a very large body of traditional knowledge, which we must do to be successfully
[#CommunicatingClimate](#)



Dr Rebecca Jarvis @reb... 29 Nov 2018

Pauline Harris works as part of the Society of Maori Astronomy, Research and Traditions - revitalising a very large body of knowledge and the links between astronomy & climate - Harris [#communicatingclimate](#) [#scicomm](#)



Dr Rebecca Jarvis @reb... 29 Nov 2018

SMART was set up to collate, preserve, and revitalise Maori astronomical knowledge to encourage and create pathways for rangatahi to engage in science and Maturanga Maori - Harris [#communicatingclimate](#) [#scicomm](#)



Dr Rebecca Jarvis @reb... 29 Nov 2018

Maori astronomy is infused throughout many aspects of traditional life, and calendar systems are key - based on ecological knowledge, weather patterns, the stars, and the oceans - Harris [#communicatingclimate](#) [#scicomm](#)



SPEAKING from the



PAULINE HARRIS Academic

During Ph.D. study
I connected with my

M A O R I

knowledge

Talk to our people to tap into this seasonal knowledge

Responding to **UNESCO**

Preserve **KNOWLEDGE** and **MONITOR**



Link with our whānau from the Pacific + other First Nations



ACADEMICS



S M A R T

Chairperson



Stars, seasons, forests, oceans - they are all connected



WAKA PEOPLE

MARAMATAKA

PANEL: DATA, DIGITAL & SOCIAL MEDIA

WHAT'S HOT AND WHAT'S NOT

Chaired by Shaun Hendy – Director Te Pūnaha Matatini, with panellists Chris Knox (NZHerald) @vizowl, Rebecca Jarvis (AUT) @rebecca-jarvis and Ellen Rykers (Journalist) @ellerykr about data, digital platforms and new forms of communication.

Rebecca Jarvis

As a conservationist, natural communicator and prolific tweeter, Rebecca took the opportunity to document her adventures with high quality video and drone footage, when she travelled to Antarctica's protected areas, including 3D material from Scott's Terra Nova Hutt. Rebecca was keen to document the process of their activities in Antarctica, while capturing the amazing scenery and wildlife. At the time a new video tool in Instagram enabled them to share the amazing scenery and wildlife with new audiences. The team involved several women, and Rebecca focussed on material that showed the human side of scientific work. Rebecca's sense of audience ranged from kids trying on virtual reality headwear with fantastic imagery, to parents of those kids, or even to inspire excellent decision making for the Antarctic Heritage Trust. This work also led to her appearance on the National Geographic Series, *Continent Seven*. Rebecca now lectures at AUT in conservation, social science and science communications.

Shaun: Do you think you are speaking to a bubble?

Rebecca: While we may start by talking to our bubble, our methods can increase the parameters of our bubble. You may attract people who are interested in the adventure aspects, or penguins, or those who are attracted to beautiful imagery.

What's Hot: travel writing, great images/photography, being authentic and human

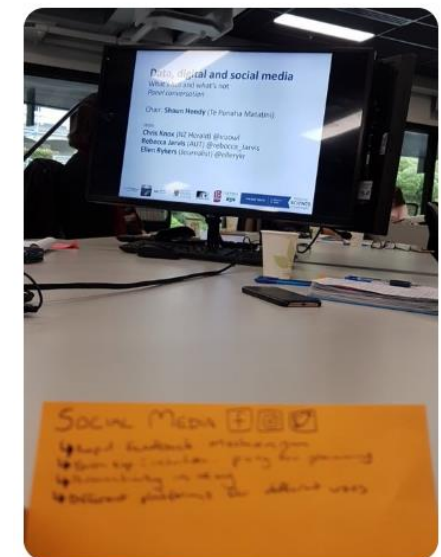
What's Not: staying in your bubble, not learning from your work

 **Fleur Templeton** @temp... 29 Nov 2018
Now @hendysh is convening a panel - what's hot and what's not with @RebeccaJarvis @vizowl and @ellerykr #data #digital #socialmedia #communicatingclimate



 **Charlotte Wood** @CharlotteWoodNZ

And what better way to get back into it than a session on data, digital and social media at the @DeepSouth_NZ #communicatingclimate colloquium





Chris Knox



Rebecca Jarvis



Ellen Rykers



FACILITATED BY

SHAUN HENDY



The Panel #1

DATA, DIGITAL + SOCIAL MEDIA



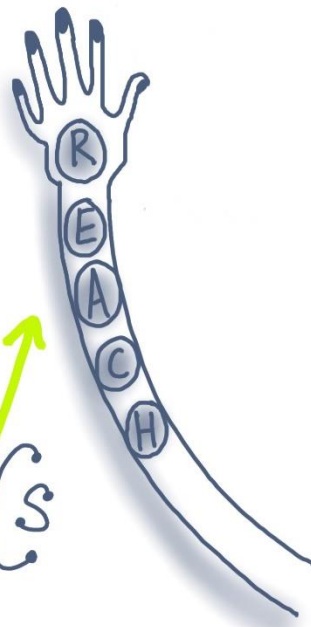
Island Bay Marine Centre

has an Awesome

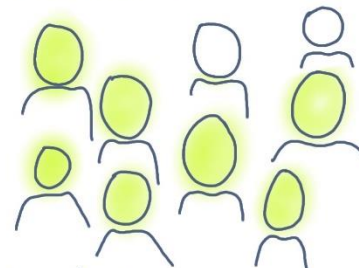


page check it out!

I disengage from ANTIMIS but they are relevant



I used social media to reach



to help me in my PhD.

I looked up the right times to 

Chris Knox

Chris's background includes a PhD in Physical Chemistry, and a post doc in atmospheric chemistry. Chris now heads the NZ Herald data journalism team and works in the space between science and journalism, packaging data-driven stories that New Zealanders might be interested in <https://insights.nzherald.co.nz/>. Data is the primary source for a story and is always presented in visually creative methods. Each team member produces an article a month, which is very slow in the media environment, building things that people get to play with and interact with. In terms of what he has learned while in his data journalism role, it's important to seek diverse opinions. "Don't back yourself – what you think is interesting may not fly, then what you regard as the most boring things are surprisingly successful. Diversity is key. Ask a wide range of people if what you are investigating is interesting. Get outside of your bubble. People need to recognise themselves in your work".

One of Chris's recent articles raised questions about the trustworthiness of scientists. He was surprised by the confused response, but from that experience he (as a scientist himself) wondered if science seems too authoritative, as though there is no room for debate. By the time 'science' gets to the media, the average reader may just see authoritative statements without seeing the debate that gets to this point. Chris encourages academics and scientists to speak out more, with courage and with nuance. A warning: you will get social media backlash, and you just need to be prepared for it and deal with it. Acknowledge different points of view – let that be part of the process.

Question from Shaun. NZ Herald seems to be the only body doing data journalism, why is there no competition? Is it experimental or a one off – will there be more?


Chris: I hope there will be more competition, it will make things easier for us. The area is much bigger overseas, especially in Australia. Radio New Zealand does a bit via freelancers. It will come.

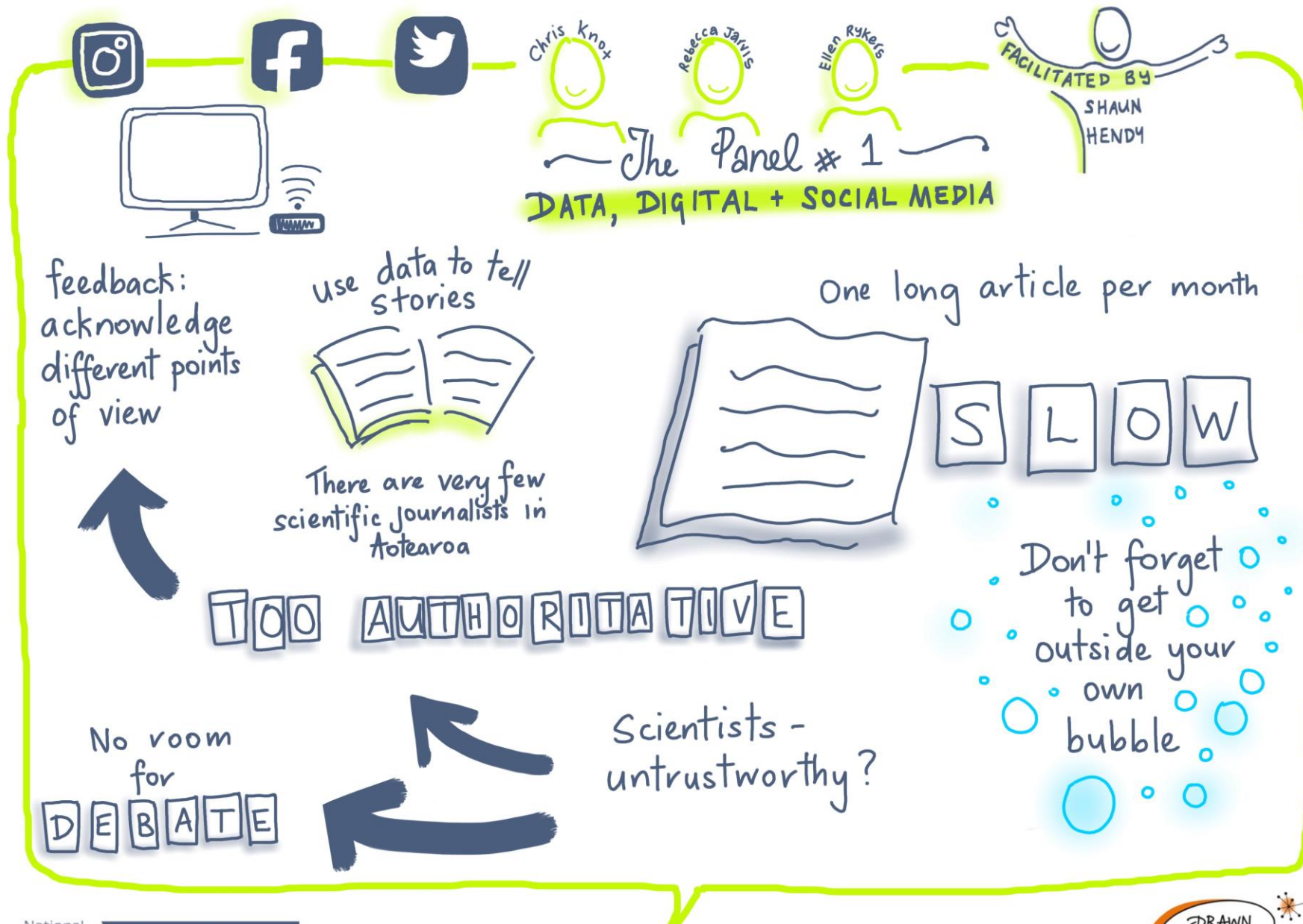
What's Hot: branching out to journalism from science, visually appealing and interactive, data-driven stories, seeking diverse opinions

What's Not: lack of competition in this space

 **Matt Plummer** @matty_... 29 Nov 2018
"No one has ever sent me a data set". @vizowl highlighting a challenge of data journalism, and hopefully something about to change
[#communicatingclimate](#)
[#DeepSouth_NZ](#)
1 6 11

 **Dr Rebecca Priestley** @... 29 Nov 2018
Data journalist Chris Knox (@vizowl) says his success metric is when "something I've done has disrupted someone's world view"
[#communicatingclimate](#)
1 8

 **Deep South Challenge** ... 29 Nov 2018
Chris Knox's personal measure of success is whether he has 'disrupted someone's worldview'. @vizowl @nzherald [#communicatingclimate](#)
3 6



Ellen Rykers

Ellen is a freelance science writer and successful social media native. Her work has appeared in *Australian Geographic*, *New Zealand Geographic*, *National Geographic*, *Lateral Mag*, *The Spinoff*, *North and South* and more. She has 1480 followers on Twitter and blogs at <https://www.ellenrykers.com/>, <https://www.instagram.com/ellerykr/>. Also, by way of intro, check out her recent piece in NZ Geographic <https://www.nzgeo.com/stories/hungry-for-rights/> about Frances Parker, a New Zealand Suffragette who fought for women's rights in the United Kingdom.

Like Rebecca, she is pro-Twitter. "There's a great community on Twitter for scientists and communicators. In regard to the question about reaching outside of that bubble, it's common in social media to think that if you have more than 1000 followers on Twitter, you will be reaching more than just scientists, so it's worth striving for that."

One of her favourite Twitter accounts is from the Monterey Bay Aquarium; a great example of how an organisation can tap into the internet culture and themes for communicating science.

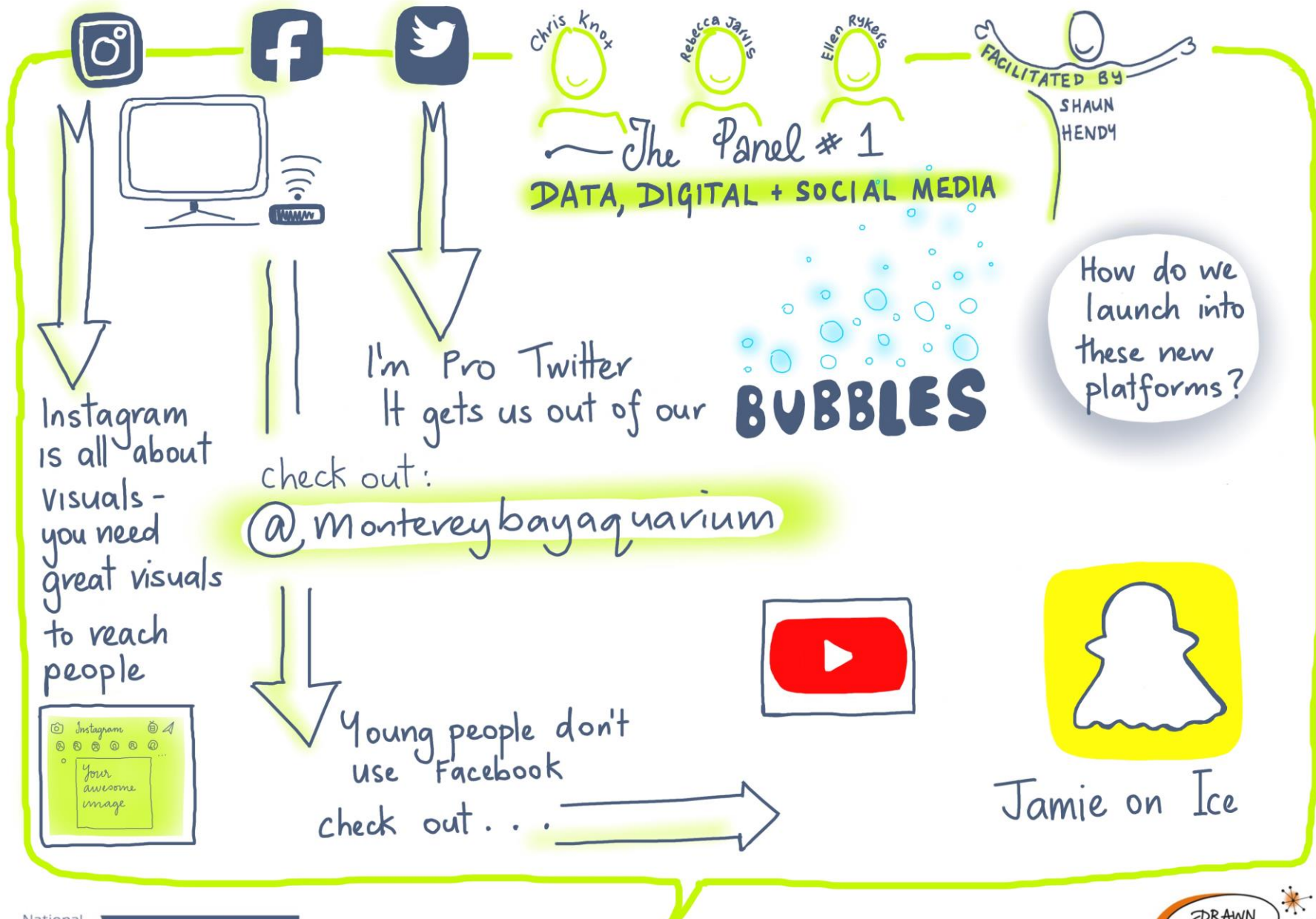
Instagram (insta) is a great medium but Ellen recommended ensuring that your images are beautiful and high quality to catch people's attention and build a following.

Consider developing a strategy beyond Facebook, Twitter and Instagram to reach younger audiences who now use channels like Snapchat and TikTok (a media app for creating and sharing short videos), an area not yet on the science communication radar. One good example of reaching young people is *Jamie's World on Ice*, produced by Damian Christie and featuring Youtube star Jamie Curry and her trip to Antarctica. This is a great example of utilising a great platform for a good message. *Jamie's World on Ice* <https://bit.ly/2D18gJx>

What's hot: using Twitter to connect with the science and science communication community, using new channels for younger audiences, *Jamie's World on Ice*

What's not: Instagram account without great imagery





General Questions

Q: What are your recommendations for article length and are people engaging in long-formats?

Chris: We aim for 2-3 mins for interactives – to get people ‘sucked in’ and they may read the whole article or click to related content if they are interested. Someone looks at those analytics, but I don’t worry about it – it seems hit and miss, I’m not sure that you can plan for it. But there is a growing appetite for long-form (i.e. 26 min read) by both media decision-makers and the audiences they represent. So, don’t be afraid of long-form material, but be aware that readers are also looking for snippets of good information as well.

Q: Does the fun/shallow stuff drive people through to deeper content

Ellen: Probably – people then learn by accident

Rebecca: I agree with Chris’s comment. I do think there is resurgence of long form, as well as clever, short snappy, fun stuff. People want both.

Q: Are your comms an integrated part of a campaign/plan?

Rebecca: I don’t have a plan, other than to be honest and open as events happen. Maybe it’s a ‘no plan, plan’. I find that people are interested in you as a human doing interesting things, as well as your scientific. I also like it as a fast feedback / conversation mechanism.

Ellen: while Instagram relies on great imagery, the accompanying stories need to be real and authentic

Chris: Journos often tweet based on ‘look at what I did today’. Some create a conversation – how do they have time for this? I just use it to promote my work.

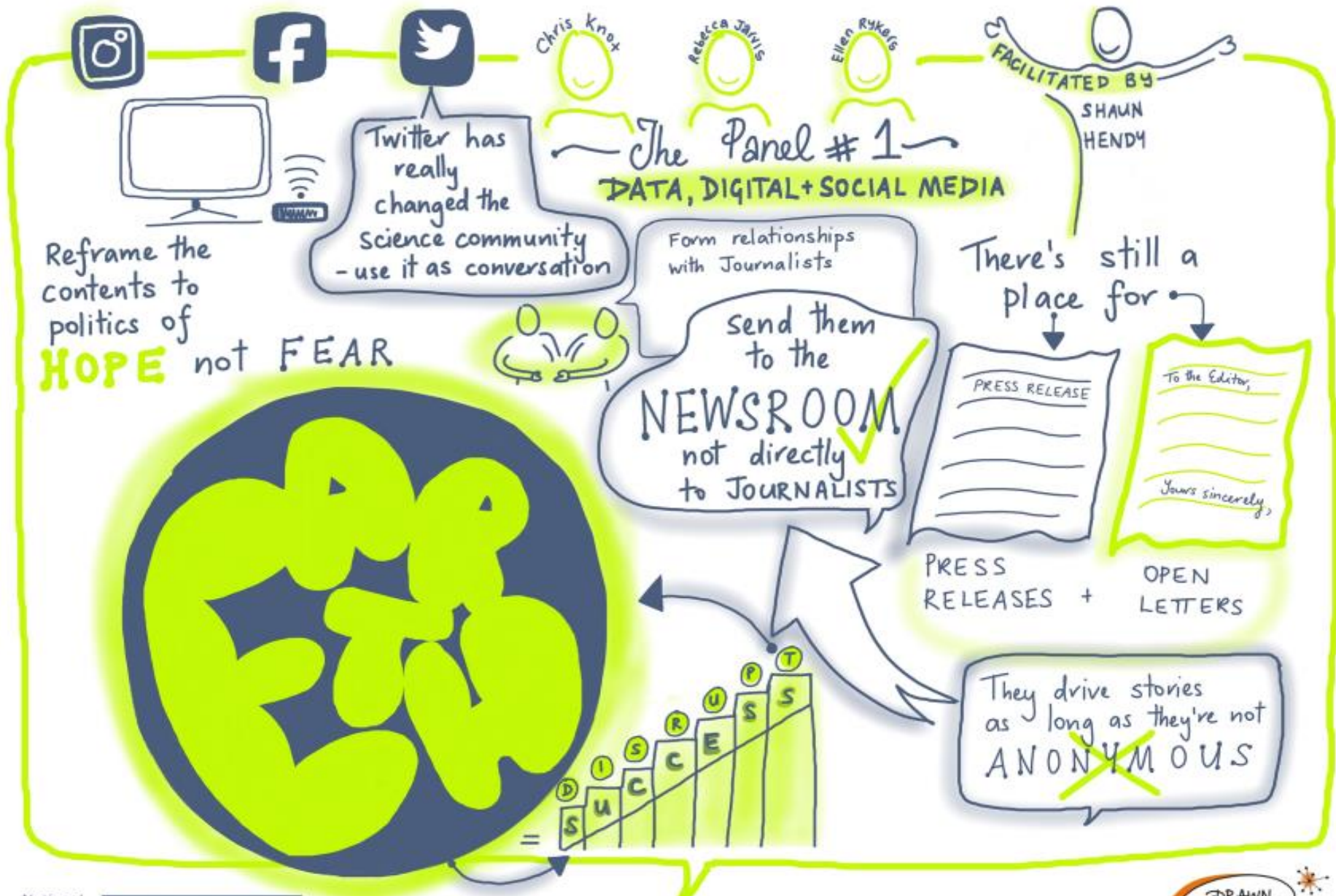
Sum up by Shaun: Communications don’t just happen, they often need a solid plan, an understanding of the context, goals and appropriate methods. You may also need a social media native to deliver it well.



Andrea #Bikes4Climate... 29 Nov 2018

Humanizing scientists is EXCELLENT for [#CommunicatingClimate](#) - in the same way humanizing business leaders/CEOs helps brands market/outreach more effectively. Build trust, build social capital and strategically/INTENTIONALLY leverage it. [#scicomm](#)

Dr Rebecca Priestley @RKPriestley
Interesting hearing [@rebecca_jarvis](#) talking about using social media to communicate science on Antarctic field trip: third person so far today to talk about “humanizing scientists” as a key [#scicomm](#) tool
[#CommunicatingClimate](#)



Q: Is Facebook passé?

Chris: Facebook is still the biggest social media driver therefore very important. Chris joined Facebook for work purposes.

Rebecca: young people are not engaging with Facebook in the same way as older generations do. Mainly used for their personal lives only and not for 'work' stuff, but you can have a professional Facebook presence.

Ellen: Young people don't use it as much as other mediums, but it still has the highest use by New Zealanders. Facebook can be great for an organisation - one very successful one is the Australian Academy of Science which has 1M followers making the most of great video content.

Q: Shaun to Rebecca – How has Twitter changed?

Rebecca: Twitter-use has grown in the science industry from a dissemination tool (one-way communication) to a platform for curated content, a two-way conversation around science, and its societal implications.

Q: What is success in science communication? How are you measuring success?

Rebecca: Success can be defined in a number of different ways, and it depends on what your purpose is. For example I would advise against going in and telling people that climate change is coming and they'll have to make a lot of sacrifices in their lives. Steer away from the doom and gloom messaging. Focus on the politics of hope rather than the politics of fear. To lead to better, more positive outcomes. Focus on the positive things people can change i.e. sustainable food sources or the education of girls. Start the conversation in different places with links to calls for action, or one small first step to sustainable changes – focus on solutions and action. To me that's what works best.

Chris: What I want to know is if something I've done has disrupted people's world view – that's the feedback I'm looking for, but most people won't talk to me directly in relation to my work.

Ellen: I do look at 'reach' and click-throughs

Chris: I deliberately disengage from analytics. There are people who follow these and cull stories that go below a certain level.

Rebecca: You can use blogs for growing reach and audience. There is plenty of information online about how to maximise your social media techniques such as ideal times to post to encourage reach etc. Biggest tip: focus on human-orientated content

Shaun: at Te Pūnaha Matatini, we look at the analytics for mainstream media, but one of our questions is how we assess the importance of the data we are getting (i.e. reach or impact in mainstream media)

Q: Are open letters and broadcast press releases still relevant in today's social media?

Ellen: I do follow these channels, and use them to find stories

Chris: Please don't send me unsolicited stuff, send that stuff via the newsroom

Rebecca: There is always a tension between old/new media, old/new ways of doing things. Science and science communication has changed too. Scientists can no longer sit in their ivory towers, removed from the world. We need to be thinking about ourselves as social humans, test the old stuff, be reflexive (Editor: if you don't know what this means, it might be a new avenue of research for you).

 **Ellen Rykers** @ellerykr 29 Nov 2018
For an MSciComm empathy assignment, made this video comparing South Dunedin & sea level rise to Chch's red zone (best with sound) [youtube.com/watch?v=IEqFn3...](https://www.youtube.com/watch?v=IEqFn3...) #communicatingclimate



1 2 5

 **Ellen Rykers** @ellerykr

Now uploaded to Twitter:
comparing sea level rise to an earthquake, in the context of South Dunedin #communicatingclimate





Chris Knox



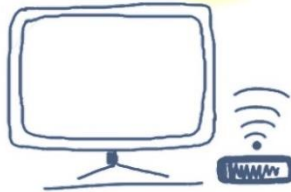
Rebecca Jarvis



Ellen Ryke's



FACILITATED BY
SHAUN
HENDY



The Panel # 1 DATA, DIGITAL + SOCIAL MEDIA

AUTHENTICITY

I use for personal posts +
 for Science Tweets



No - it's very important to many New Zealanders

RESONATES

There's still lots of potential with media - video works well

Journalists are encouraged to use social media



INSTAGRAM

24 HOUR STORIES

Publish your beautiful Images

Add to your story - lasts 24 hours



Q: What will we be talking about in 5 years

Rebecca: We can't even imagine now what we'll be doing then. I think we'll be in a completely new space, we won't be in this room, our meetings might be virtually say in Antarctica, or a Pacific Island

Chris: Definitely augmented reality

Ellen: Virtual Reality experience NatGeo/NZGeo is working on this now <https://www.nzgeo.com/vr/>

*By this point in the day,
we were trending on Twitter*



PANEL 2: MEETING IN THE MIDDLE ~WHERE CLIMATE STORIES AND HUMAN STORIES COLLIDE

Crafted by Tim Corballis – Lecturer, Centre for Science in Society, VUW, a space was created for Alex Keeble, (Senior Communications Advisor for the Deep South National Science Challenge @DeepSouth_NZ), James Renwick (Professor, VUW@CubaRaglanGuy), Sarah-Jane O’Connor (Science Media Centre @DrSJNZ) and Pip Adam (author, @PipAdam) to meet in the middle, where climate stories and human stories collide.

Each person shared with us their very real and human experiences of their craft and of the collision of the personal and professional, or of cultures, world views, ideas, and scientific reputation. While these words will not capture the power of hearing these stories first-hand, they will hopefully jog your memory.

Tim Corballis

The power of the story: Tim shared with us a story about a recent trip to the United States. After hopping off the plane in San Francisco, the driver of the airport shuttle was a Mexican-American man. The conversation quickly turned to climate change. He was extremely well-versed and Tim appreciated this man’s insight and knowledge of the issues. He spoke about division between the people and the people in power. The conversation of a taxi driver in California has made an impact on Tim and altered his thinking on US issues and events. Stories can impact the way we see the world. Stories can also help us think more carefully about how science can talk to people. Now for some provocations from our speakers....



Lisa McLaren
@mclaren_lisa

Next panel for the day at the [#communicatingclimate](#) colloquium... How science, in particular climate change, and stories collide. Tim Corballis, VUW [@DeepSouth_NZ](#) [#climatechange](#) [#climate](#) [#storytelling](#)



Fleur Templeton @temp... 29 Nov 2018
Now for some ‘provocations’ with a fantastic panel led by Tim Corballis



Fleur Templeton @temp... 29 Nov 2018
With Alex Keeble from [@DeepSouth_NZ](#) [@CubaRaglanGuy](#) [@DrSJNZ](#) [@PipAdam](#) all talking about different ways of telling the stories - humanising them [#CommunicatingClimate](#)

1 2 6 ...



Alex Keeble

Alex gave a powerful personal account highlighting the power of stories to shape the course of history, inspired by her ancestor Herbert Swire, who was ship's painter on the HMS Challenger 1872 to 1876 (voyages that founded the discipline of oceanography). Using his paintings as a springboard, Alex explored the way our stories convey values, and that as much as in a painting, our values are present in our press releases, our web stories or our social media posts. She asked the room to consider who we centre as our heroes and how our own values shape the direction of our organisations, and therefore the impact our organisations might be having in the public domain.

 **Dr Rebecca Jarvis** @reb... 29 Nov 2018
In the course of doing some ancestral research, Alex found she had a relative on the first scientific expedition to Antarctica, which "founded the sciences of oceanography" using novel methods to measure ocean temperature and geology - Keeble @DeepSouth_NZ #communicatingclimate

 **Dr Rebecca Jarvis** @reb... 29 Nov 2018
Alex's ancestor on the Antarctic voyage was also a painter and writer - Herbert wrote that the iceberg nearby "was getting very monotonous" - they fired a cannonball into the face of the ice - Keeble @DeepSouth_NZ #communicatingclimate #scicomm

 **Dr Rebecca Jarvis** @reb... 29 Nov 2018
All science communication is storytelling - it shapes history and affects the decisions that are being made - Keeble @DeepSouth_NZ #communicatingclimate #scicomm

 **Dr Rebecca Jarvis** @reb... 29 Nov 2018
Very nifty @DeepSouth_NZ project on the voyages that travelled to the Southern Ocean far before Western scientists took their ships - Keeble #CommunicatingClimate #scicomm

 **Dr Rebecca Jarvis** @reb... 29 Nov 2018
Climate models tell us what has happened in the past, and what may happen in the future - Keeble @DeepSouth_NZ #communicatingclimate #scicomm


 **Lisa McLaren** @mclaren_l... 29 Nov 2018
Values we choose to centre a story in will impact the outputs. Logos, pictures are powerful tools.. What story are they telling? Who and What are they privileging? Who is empowered to tell the stories? How do we support people? #communicatingclimate @DeepSouth_NZ #climate

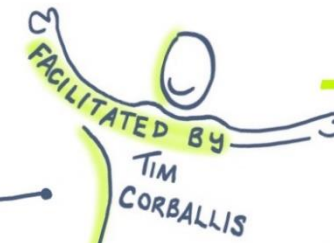
 **Dr Rebecca Jarvis** @reb... 29 Nov 2018
People's values affect the decisions they make - Keeble @DeepSouth_NZ #communicatingclimate #scicomm

 **Dr Rebecca Jarvis** @reb... 29 Nov 2018
Stories are the fuel that drives the engine of this planet - Keeble @DeepSouth_NZ #communicatingclimate #scicomm

 **Arran Whiteford** @arran... 29 Nov 2018
Apparently the most common urge people have when next to a massive iceberg is to shoot it. BAAM!!

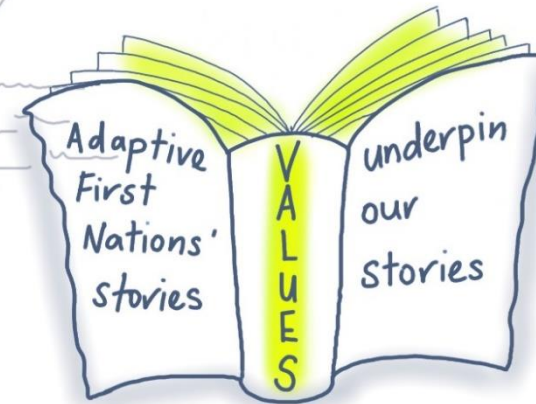
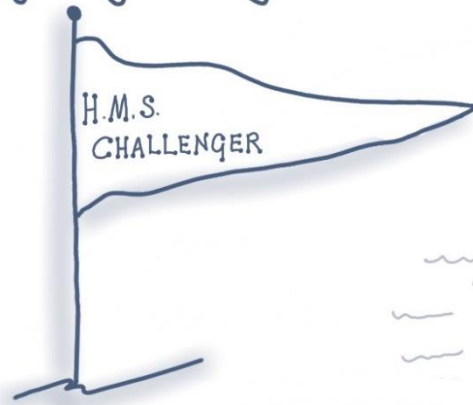
- confirmed by three independent stories ranging from first explorers to cruise ship tourists, modern and old, guns and cannons. #communicatingclimate #scicomm #DeepSouth_NZ

 **Matt Plummer** @matty_... 29 Nov 2018
Perhaps unsurprisingly, the importance of strong, inclusive narratives a common theme in communicating climate science: "Stories are the fuel that drive the earth." A topic close to my heart #communicatingclimate #DeepSouth_nz



The Panel #2

My family history research ...



My Great, Great, Great Uncle Herbert was the Ship's Artist, + he took copious notes. HMS Challenger embarked on the first global research expedition... oceanography began here. The Grand Tour of 1873- 1876. She sailed close to Antarctica. NIWA holds the records.

James Renwick

James is Professor of Geography at Victoria University and outspoken scientist in regard to climate change and is often interviewed in response to the latest research, or event. He found himself really putting himself on the line in a TV news interview. It's one thing to talk about scenarios and emissions and various other scientific jargon, but another to talk about what climate change might mean in a few decades in his own back yard. The reporter asked the question, 'so in 60 to 80 years' time, all these houses will be gone? Standing next to sand dunes, a road and houses all within 3-4 meters of the lapping waves, he looked at his neighbours' front gardens and wondered if they would be there by the end of the century. He doubted himself for a minute, and thought 'Wow, is that really what I'm saying?' He had a choice to make, in the moment before he made that comment, the enormity of his statement and its consequences ran through his head, 'do I really think this?' I live here, my neighbours will see this. What are the consequences for me? This is really important that I can stand by these dramatic statements. I took a deep breath and stepped back, and while making a sweeping gesture said, 'yes, that's right all of this would be gone' on national television. And he continued, 'Either we shift them, and we manage that process, or else they all get washed away. Come back in 2090/2100 and all this will be quite different, and that road will be gone as well.'

The final story included a visual representation of where the coastline might be in a few decades time.

"We are really talking about people's lives changing. Three metres from the coast is not just some academic concept. It involves actual people, actually having to move. It shocked me to articulate that in public, and I have to be vulnerable to connect with the audience."



Lisa McLaren @mclaren_1... 29 Nov 2018

James Renwick describing consequences of climate change communication. Nerves of describing implications of sea level rise on peoples lives/homes. These decisions involve real people. You have to show heart. Talk about what matters to people. [#communicatingclimate](#) [@DeepSouth_NZ](#)

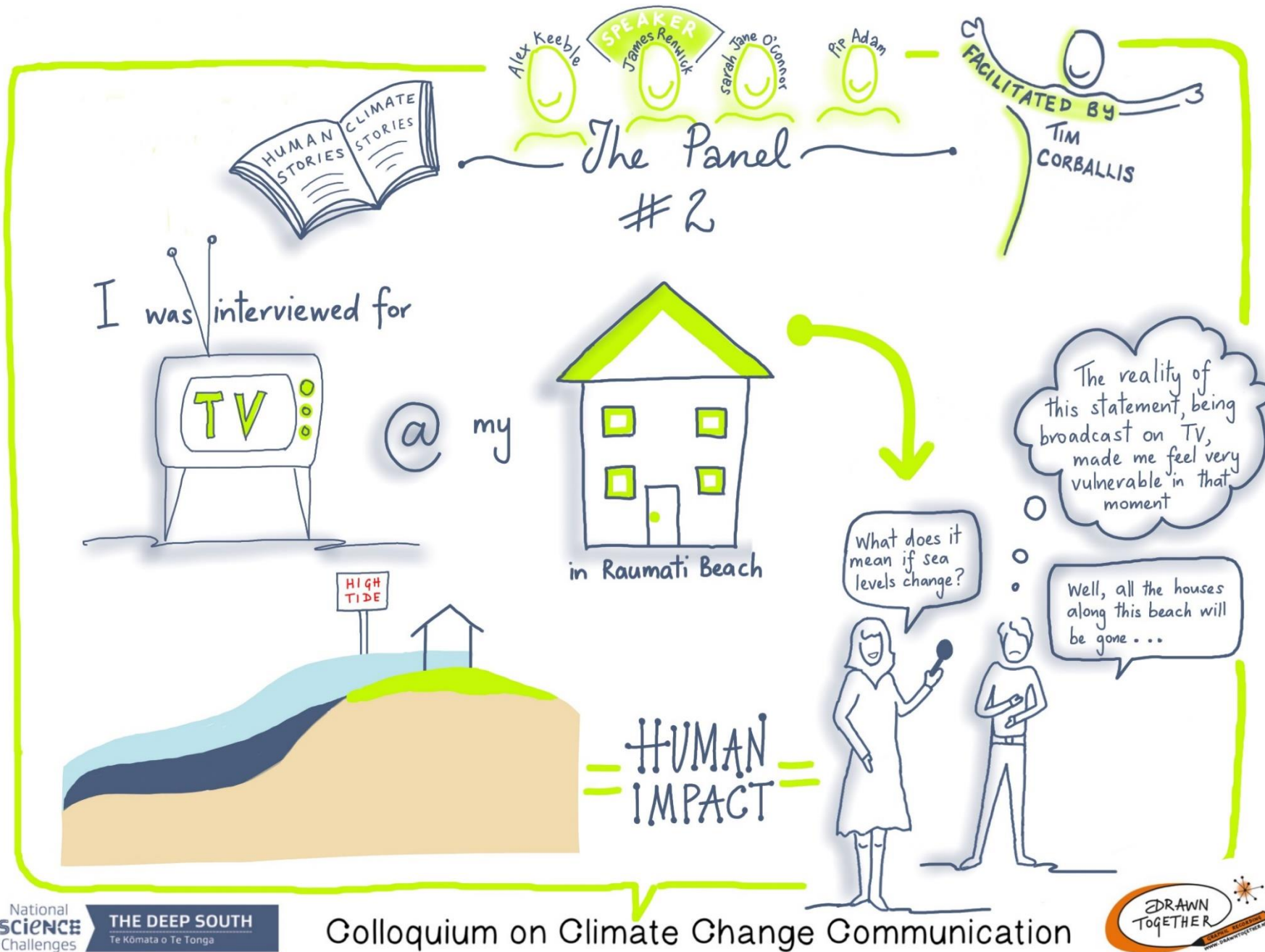


🗨️ ↻️ 2 ❤️ 5 ⋮ 📏



Dr Rebecca Jarvis @reb... 29 Nov 2018

If we want to be effective communicators we have to be vulnerable and show heart - Renwick [#communicatingclimate](#) [#scicomm](#)



Sarah-Jane O'Connor

Sarah shared some insights from her experience working at the Science Media Centre (<https://www.sciencemediacentre.co.nz/>)

- To be contrary, I don't think that people and climate stories collide at all. That's where the stories are. The stories need to be tangible and relevant. For example, when the Deep South Challenge released its report on stormwater and wastewater, it had huge impact, as that has immediate relevance for people lives. We weren't sure what would happen, but every media outlet picked it up. The report referred to Edgumbe flooding which already had a very clear dollar value associate with it. There is about \$20b worth of assets in these storm and waste-water systems - something the media could really grab onto. There was a clear story there that showed we had really moved on from stories about the climate system changing to what does it mean?
- It's a simple truth that journalists need people to talk to, for readers to connect with. Here's a great example of the story of coastal flooding being told from first person accounts through a Stuff interactive, by Charlie Mitchell. Starts with a guy sitting on a seawall in a small town in NZ. <https://interactives.stuff.co.nz/2018/11/beach-road/>. He's a great journalist, he started in the personal but was able to pull from that single person, the larger story of sea level rise, predictions, insurance retreat, and social implications. One of the lines is "the rich people will get sea-walls, the poor people will move". Telling a compelling story that also had a lot of technical data in it. But it needed to start with the guy in the small town.
- We also need scientists, researchers, experts and specialists (like James who we are very grateful for) to answer the phone and their questions, especially with Stuff starting its year-long climate change platform.
- We can't just talk about the main centres of Wellington, Auckland and Christchurch – we need to talk about Napier, and Dunedin, and other regions. People want to know what's happening in their towns. What does it mean to me? Think about regions, small towns and communities and keep it personal. Understand the compounding issues of historical implications of colonisation as compounding factors in Māori and Pacific communities.
- The most-read story this year, was a well written story about sea-level rise in Petone, in Stuff <https://bit.ly/2TvkFg8> and followed up with economist Belinda Story on *The Project* <https://bit.ly/2DNetKH>, a great example of using media to talk about these issues following a report by Elisabeth Ellis: 'How should the risk of sea-level rise be shared' (<https://bit.ly/2D16N64>) and Eloise Gibson did a great job with reliable science in her story <https://www.newsroom.co.nz/2018/12/05/351236/playing-chicken-with-the-government-on-rising-seas>.
- Journalists are busy, we help them by making expert reliable responses available so the story can carry on in a scientifically robust conversation, where possible. We need to help them not only tell the story of what's happening but what people can do about it.



Lisa McLaren @mclaren_l... 29 Nov 2018
Media need ways to tell personal stories - combine technical details with real world stories & experiences, and ways to bring it back to local communities. They need experts to answer the call when need advice/science information for articles. [#communicatingclimate](#) [@DeepSouth_NZ](#)



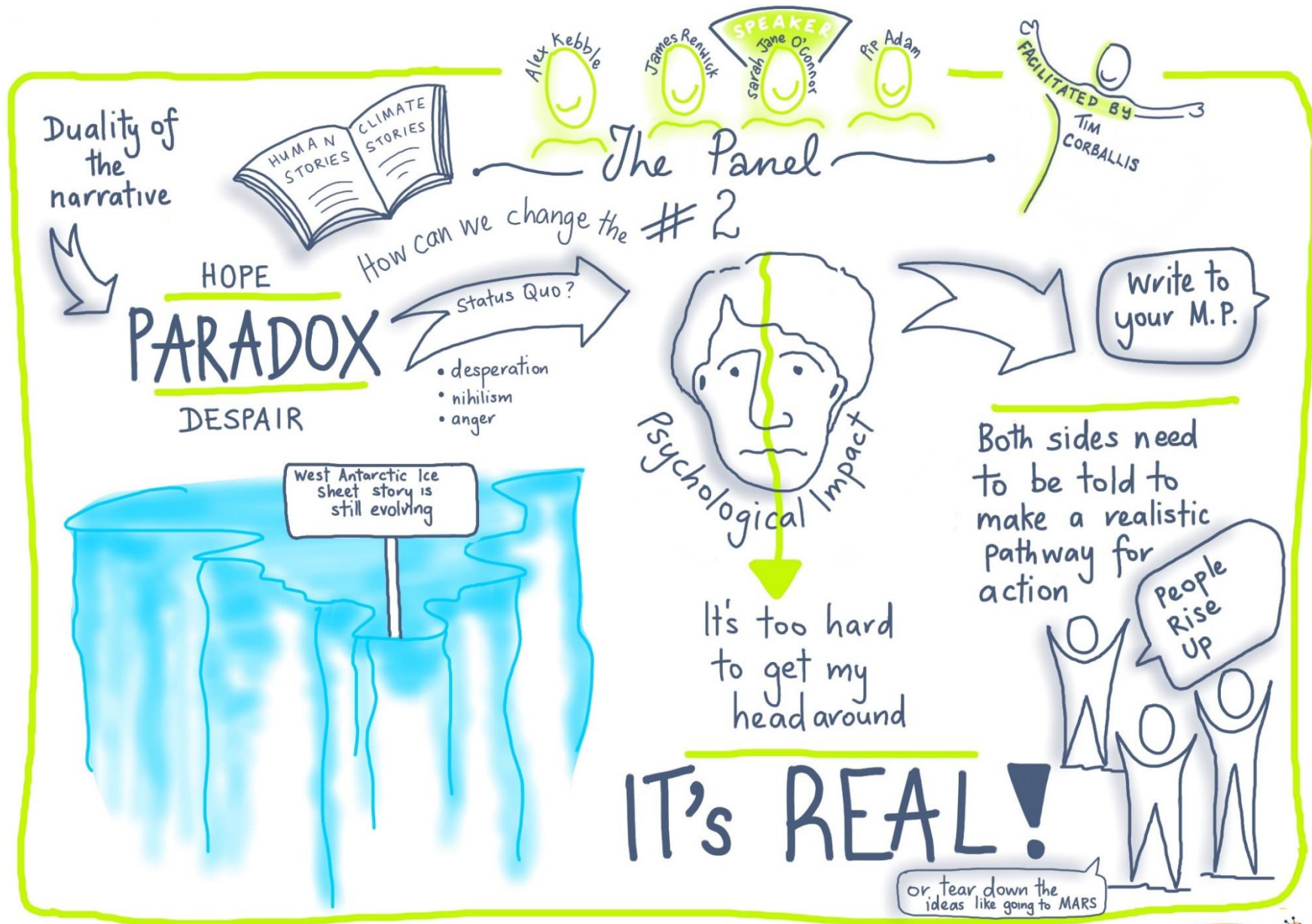
Dr Rebecca Jarvis @reb... 29 Nov 2018
People need stories that are relevant to them - beyond Auckland and Wellington and across NZ - what is happening in their towns, where they live? How will it affect them? - O'Connor [@smcnz](#) [#communicatingclimate](#) [#scicomm](#)
🗨️ 3 ❤️ 5 ...



Dr Rebecca Jarvis @reb... 29 Nov 2018
Effective stories start with a person, e.g. a person sitting on a seawall and what climate change will mean for them. How will rising seas affect them? Support this with key facts. But start with someone and humanise your story - O'Connor [@smcnz](#) [#communicatingclimate](#) [#scicomm](#)
🗨️ 1 🔄 2 ❤️ 7 ...



Dr Rebecca Jarvis @reb... 29 Nov 2018
Science communication and storytelling needs to be tangible - a big clear story that media can grab on to about what is happening and what it means - O'Connor [@smcnz](#) [#communicatingclimate](#) [#scicomm](#)
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Pip Adam


Writing is a medium and process to explore the concepts, issues Pip is wrestling with. Pip's first novel *I'm Working on a Building* was about seismic structural engineering, of buildings real and imagined. Her latest novel, *The New Animals* is based on the fashion industry, pathological consumption and perceived obsolescence. Pip read a lot of science and tech about how fast fashion is made, and the detrimental effect on the environment. There is heart-breaking waste in the fashion industry –15 tonnes of used textiles are thrown away each year, and on average, each of us are wearing a single item of clothing about 7 times. Clothing and textiles are perfect products of capitalism with built in obsolescence as they don't wear out, we just buy more. Pip hopes we are moving towards a place where there is less fast fashion.


The other thing Pip wrestled with was that we may be the generation that sees the extinction of our species. "Maybe the world would be a much better place without us! We must change, or we won't be here anymore. I became very interested in the idea of adaptation and how fast our bodies could shift and change and particularly if our bodies could survive under water. I got to a place where I was investigating books that were quite apocalyptic with reoccurring narratives of the tension between the individual hero and the marauding hordes – the many being the enemy of the one specially selected human being. As an anarchist, this didn't appeal too much to me, but then I started seeing these narratives repeated in the real world, and fiction being a mirror rather than a projector. How much of fiction bleeds into our real lives? Especially in narratives of end days. I started thinking about my own responsibility in this novel and thought about an individual hero pursuing solutions to protect the many rather than typically protecting themselves. What sort of hero do we imagine we'll be? Are we kidding ourselves to think we'll be running with a rifle shooting people like in the movie *Mad Max*. The hero in this book is much more worried about the community, and intentionally disappears to be part of the community."


 **Dr Rebecca Priestley** @reb... 29 Nov 2018
Now @PipAdam talking about "pathological consumption and perceived obsolescence"
[#communicatingclimate](#)
💬 ↻ ❤️ 1 ...

 **Dr Rebecca Jarvis** @reb... 29 Nov 2018
Up now, @PipAdam on communicating science and climate change through fiction
[#communicatingclimate](#) [#scicomm](#)
💬 1 ↻ 2 ❤️ 4 ...
[#communicatingclimate](#)
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[Show this thread](#)


 **Dr Rebecca Jarvis** @reb... 29 Nov 2018
What if the hero of the story cares about the community and is a part of it instead? What if the hero is not the individual who tries to saves the world on their own, but works with others to save the world together? - @PipAdam [#communicatingclimate](#) [#scicomm](#)
💬 ↻ ❤️ 2 ...

 **Dr Rebecca Priestley** @reb... 29 Nov 2018
Best phrase uttered so far today from @PipAdam : "as an anarchist, this didn't appeal much to me"
[#CommunicatingClimate](#)
💬 ↻ ❤️ 5 ...

 **Dr Rebecca Jarvis** @reb... 29 Nov 2018
What is our responsibility in writing fiction around climate change? Can we find a solution for the many? Do we need a protagonist that is a hero? Has this hero complex leaked into each of us a little bit? - @PipAdam [#communicatingclimate](#) [#scicomm](#)
💬 4 ↻ 1 ❤️ 3 ...

 **Dr Rebecca Jarvis** @reb... 29 Nov 2018
. @PipAdam started seeing reoccurring apocalyptic narratives in fiction, with an individual hero who will save the world despite the marauding hordes. But then Pip started seeing words from this fiction bleed into mainstream media
[#communicatingclimate](#) [#scicomm](#)
💬 ↻ ❤️ ...

 **Matt Plummer** @matty... 29 Nov 2018
let's fast forward to less fast fasion. Pip Adam presenting a fiction writer's perspective to the dicussion
[#communicatingclimate](#) [#DeepSouth_NZ](#)
💬 ↻ ❤️ 1 ...

 **Pip Adam** @PipAdam 29 Nov 2018
Thank so much everyone at [#communicatingclimate](#) - what a room full of incredible people.
💬 1 ↻ 1 ❤️ 7 ...

 **Rhian Salmon**
@rhiansalmon

Replying to @PipAdam

Thanks for coming - and bringing anarchy into the mix!
[#CommunicatingClimate](#)
[@DeepSouth_NZ](#)

1:35pm · 29 Nov 2018 · Twitter for iPhone



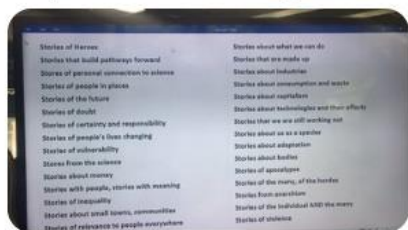
Group Discussion: Pick a story, and share stories

During this session Tim was collecting a comprehensive list to broaden the idea of 'the story':

Stories of Heroes
Stories that build pathways forward
Stores of personal connection to science
Stories of people in places
Stories of the future
Stories of doubt
Stories of certainty and responsibility
Stories of people's lives changing
Stories of vulnerability
Stores from the science
Stories about money
Stories with people, stories with meaning
Stories of inequality
Stories about small towns, communities
Stories of relevance to people everywhere

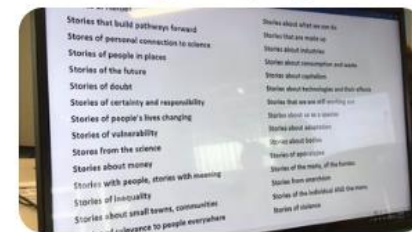
Stories about what we can do
Stories that are made up
Stories about industries
Stories about consumption and waste
Stories about capitalism
Stories about technologies and their effects
Stories that we are still working out
Stories about us as a species
Stories about adaptation
Stories about bodies
Stories of apocalypse
Stories of the many, of the hordes
Stories from anarchism
Stories of violence
Stories of the individual AND the many

 **Dr Rebecca Priestley** @... 29 Nov 2018
Story time [#communicatingclimate](#)



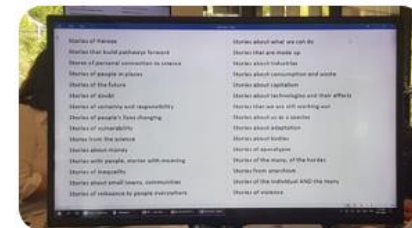
1 2

 **Lisa McLaren** @mclaren_L... 29 Nov 2018
Stories that came out of the panel at [#communicatingclimate](#) [@DeepSouth_NZ](#) [#future](#) [#doubt](#) [#adaptation](#) [#apocalypse](#) [#responsibility](#) [#money](#) [#climatechange](#) [#inequality](#)



1 2 4

 **Dr Rebecca Jarvis** @reb... 29 Nov 2018
What climate change stories have you heard that fit these narratives? Are these stories old, new, useful? [#CommunicatingClimate](#) [#scicomm](#)



1

 **Dr Rebecca Jarvis** @reb... 29 Nov 2018
"What does climate change mean for me?"

Always think about this question, from the point of view of the reader/ audience, before you start telling the story - O'Connor [@smcnz](#) [#communicatingclimate](#) [#scicomm](#)

1 2 2

We moved to an interactive session in small groups, to practise telling stories and consider the nature of the story, is this an old story or a new story, has it been around forever, is it useful?

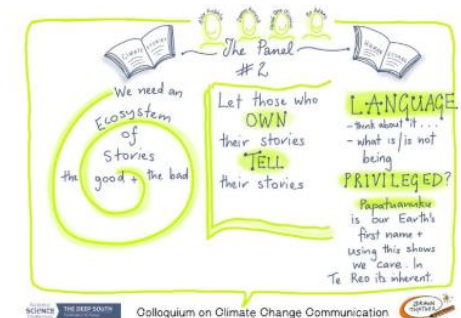
Feedback about narratives, messages, framing storytelling and other philosophical questions:

- 'Anarchy' was a recurring thread through the day often capturing the sentiment and frustration of needing to challenge the system, status quo or business as usual.
- How do we capture the feeling of desperation, and anger and nihilism?
- Are we (the media) too focussed on bad news, do we need to tell good news stories?
- How do we present reality, at the heart of it some key industries and organisations have a big impact on climate (and do they care?)
- Discussion: Industrial dairy has ravaged the environment and climate. Action on policy in this area won't happen until there is population level demand, when men, women and children rise up and write to their MPs. Change is going to happen, there will be no exception – dairy should get on board.
- Discussion: how do we tell stories of people rising-up? Or tearing down hierarchies of power. Say, we're a household that thinks we can do a lot, but there are others whose plan B might be going to Mars. In fiction (from Pip), you can imagine another reality, test some ideas, and consider many 'what ifs...'
- Narratives need shades of light and darkness. We should not be too shy to tackle hard concepts, but don't couch stories in total darkness. On the flipside "don't suck on the meth pipe of hope'. While it's all too grave, too big, we stuck in story wars, but the jury's in, climate change is real, we're all going to die, but how are we going to live?
- There is a paradox, the duality of the (disaster) narrative, and the counter/competing narrative
- Also need to engage on a shared/common level, to meet a person or audience where they are now
- There is an ecosystem in our media development, with some impenetrable barriers. I've had to convince a media outlet to 'allow' a Māori author to tell a Māori story – it seems simple to say we need to foster and nurture voices that represent our entire community, but there are real barriers.
- The language we use shows what we care about. English, (in representing a western world view), is privileged and will present concepts in a certain way and struggles to make some of these issues about our world real. In Te Reo, it's natural to give the environment first name status, so of course you will care about an entity such as Papatūānuku, when your language gives it prestige and status, and considers that we are in a relationship with the planet, not just what we can get out of it. Herein will lie some of the solutions, when we draw from alternate world views. There is a Western history of 'exploitation' yet indigenous voices focus on care and connection with environment.



Language matters...
[#communicatingclimate](#)
[@DeepSouth_NZ](#)

Translate Tweet



Dr Rebecca Jarvis @rebecca_jarvis

How do you tell the story of people rising up and acting together? We want to know what this is and what this looks like

#communicatingclimate #scicomm

Shaun Hendy @hendysh 29 Nov 2018

Knowledge is embodied in people

#CommunicatingClimate

Dr Rebecca Jarvis @rebecca_jarvis

Interesting point from Sarah Fraser from @niwa_nz - their metrics show that the profiles of their scientists are the most highly clicked on parts of their website

#CommunicatingClimate #scicomm

Ellen Rykers @ellerykr 29 Nov 2018

Here's the fantastic story @DrSJNZ mentioned #communicatingclimate

Charlie Mitchell @comingupcharlie

Sea levels are likely to rise for centuries, which will reshape where future New Zealanders can live. But new buildings are still being built on the coast, and there's no framework for dealing with the inevitable damage.

interactives.stuff.co.nz/2018/11/beach-...



Beach Road: The rising sea and the reshaping of New Zealand

interactives.stuff.co.nz

Charlotte Wood @CharlotteWoodNZ

"Change is going to happen and there will be no exception"

Interesting to think about this in a policy context like the ETS

#communicatingclimate

12:16pm · 29 Nov 2018 · Tw

Matt Plummer @matty_plumski

"Avoid sucking on the meth pipe of hope" Favourite quote today

#communicatingclimate #DeepSouth_NZ

Rhian Salmon @rhiansalmon

Quote courtesy of Mike Smith

[twitter.com/matty_plumski/...](https://twitter.com/matty_plumski/)

twitter.com/rhiansalmon/status/106791...

1

Dr Rebecca Priestley @RKPriestley

Quite a bit of talk about anarchism now, things are getting exciting 😊

#communicatingclimate

12:12pm · 29 Nov 2018 · Twitter for iPhone

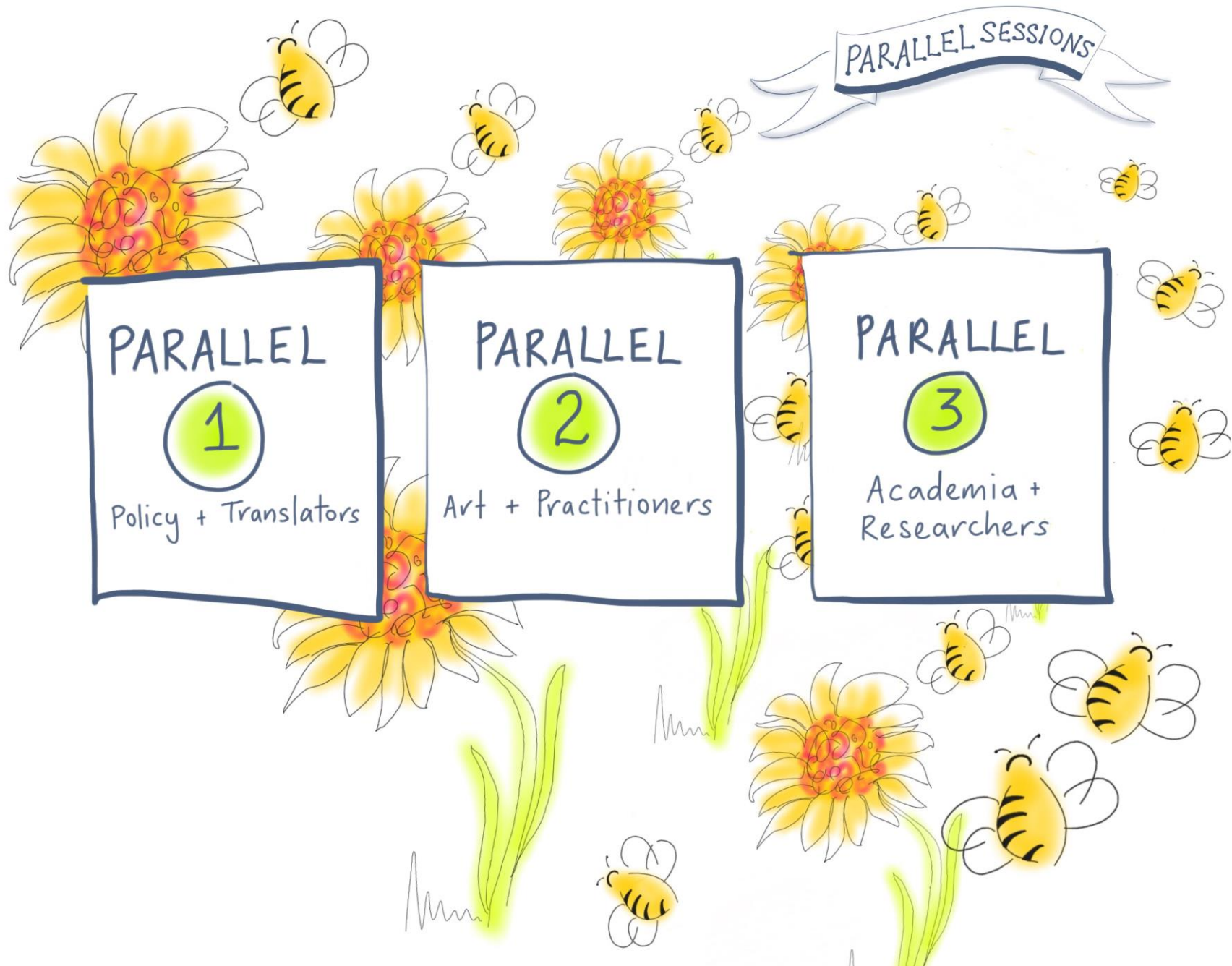
1 Reply 2 Retweets 12 Likes

Reply to @RKPriestley

Lauren McLean @eI_macs 29 Nov 2018

Replying to @RKPriestley @CubaRaglanGuy

Well nothing else has worked. When the system is literally dragging us into potential extinction, what other choices are left to us?



AFTERNOON — PARALLEL SESSIONS

For this activity, we separated into three groups by practice/discipline:

- Artists and communication practitioners
- Academics and other researchers
- Policy makers and 'translators' (advocates and activists)

And asked two central questions:

How does each group contribute to the communication of climate change?

What does each body need from the other two groups? What pollen does each 'flower' need from the other flowers, to grow and thrive?

ARTISTS AND COMMUNICATION PRACTITIONERS

How do artists and communicators contribute to climate change communication?

- Within science/communication fields:
 - o To provoke and disrupt, ask hard questions and demand answers – on behalf of others, vulnerable, exploited
 - o Aid with campaigns, dissemination of stories, powerful messages, imagery, metaphor – to bridge gap from knowledge to understanding to action
 - o Tangible output and outcomes ie artworks, installations
 - o Helping the science and scientists communicate well, more accessible and relatable
 - o Measuring impact – ethereal (art/creative practise)
- Delivery to publics: Considering, connecting and crafting for various/diverse audiences
 - o Connecting to hearts, minds, lives - the personal human connection via emotions, values, persuasion,
 - o Keep it real, applicable, relevant to non-science/other communities
 - o Translation to create accessibility to science, 'demystify',
 - o To tell the story of adaptation and opportunities
 - o Translating values / complex ideas



Deep South Challenge ... 29 Nov 2018

Last session of our [#communicatingclimate](#) day: cross pollination between science, policy and creative frames. Here are the flowers 🌸 and the bees 🐝



Dr Rebecca Jarvis
@rebecca_jarvis

.@o_gabbyo opens our afternoon breakout session for the "doers" of [#scicomm](#) - artists, writers, and practitioners - on the importance of speaking different languages when [#CommunicatingClimate](#)



- Making research and policy relatable
- Really good graphics/visual communication
- Challenging ‘who is our audience? Who is not in the room?’
 - Young people, migrants, vulnerable people and communities

What can artists and communicators offer researchers and academics?

- Authentic voices, awareness of other cultures, and to tell Pacific stories (climate refugees)
- Altruism, give voice to...
- Science Fiction – ability to imagine other norms
- Representation of cultures, communities
- Good visuals, graphics, ways of communicating to reach people
- Embedded communicators in research projects

What can artists and communicators offer the policy-makers and advocates?

- Curation or translation of data and information that is easy to understand and delivered in audience relevant ways
- More visual data
- More communicators for policy environments who can speak to hearts and minds
- Participation, space for discussion, engagement opportunities – such as this event!
- Two-way engagement– need to know more about what people and publics/sectors are concerned or interested in
- Maybe considering carbon zero as part of funding criteria


 **Rhian Salmon**
@rhiansalmon

And the “do-ers” : artists, writers, practitioners ... all
#CommunicatingClimate
@DeepSouth_NZ

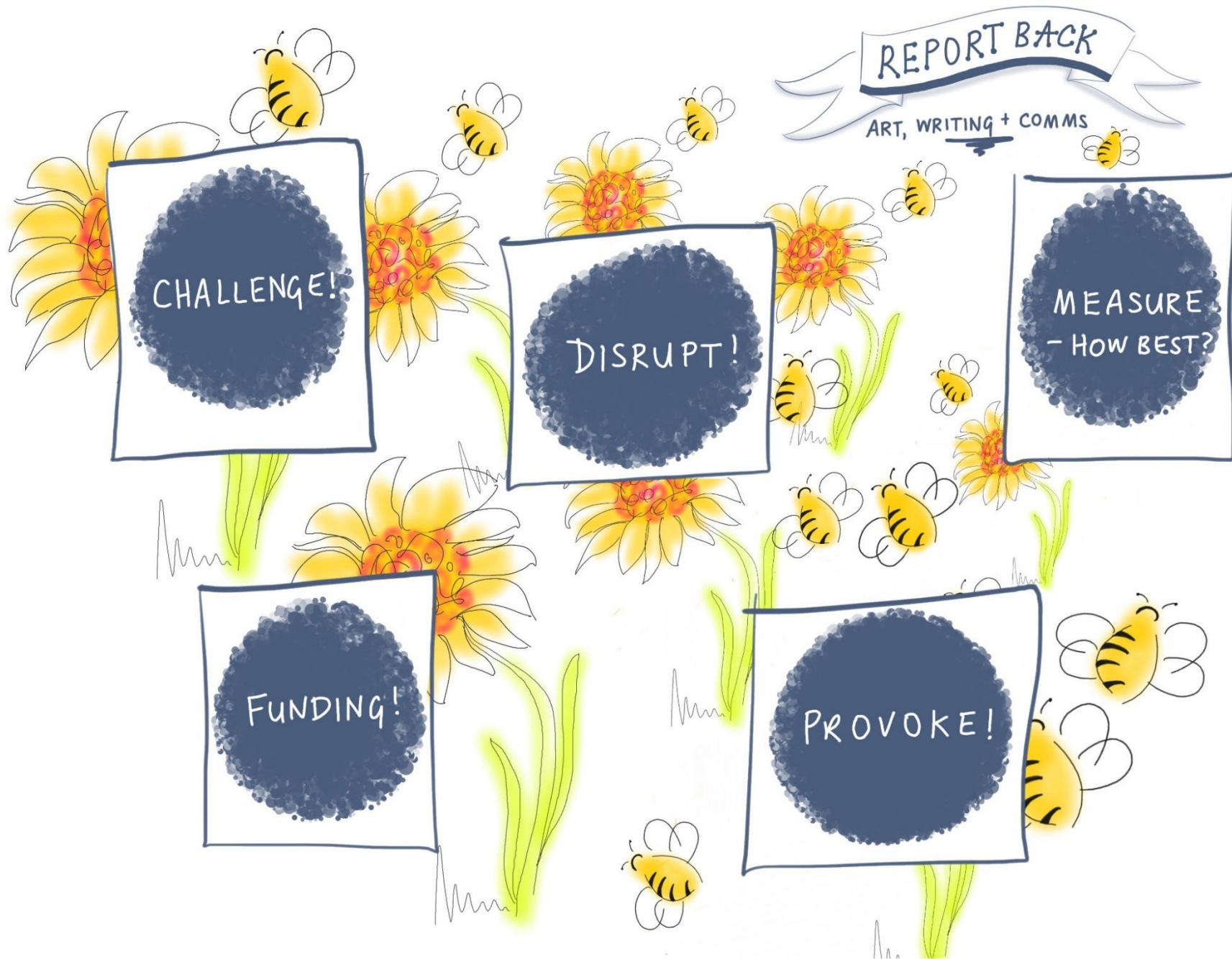


 **Dr Rebecca Jarvis** @reb... 29 Nov 2018
What does art/writing/comms *need* from policy and activism, and what can it *offer*?
#CommunicatingClimate #scicomm

- What does art, writing and communication need from policy / activism?
- Or: where separate art and activism?
 - New calls to action
- What can art, writing and communication offer to policy / activism?
- Making tangible and accessible for policy people
 - Storytelling
 - Resources / Ideas / archive / library of ideas and techniques
 - New calls to action?

 **Dr Rebecca Jarvis**
@rebecca_jarvis

Artists are important for processing complex climate research and being able to communicate this complexity clearly using the tools and skillsets they have - @o_gabbyo
#CommunicatingClimate #scicomm



ACADEMICS AND OTHER RESEARCHERS

Those who pursue new knowledge for the progress of society

Q: How do **academics and researchers** contribute to climate change communication

- Contribute to the curriculum of knowledge such as the historical implications of our human relationship with energy
- Engaging in public conversation: understanding the media role in democracy
- Psychological/human behaviour research can offer important understanding
 - o in terms of how people make decisions
 - o to inform our activities and communications to ensure effectiveness/impact
 - o to further enhance understanding of audiences and inform narrative framing to encourage action and avoid fatalism, polarity of thinking, fatigue
 - o to help us framing numbers and statistics carefully to communicate the practicalities of behaviour change i.e. imagining a carbon free future
- Hazard resilience - cross-disciplinary community resilience-building models / self and collective efficacy
- The process of academia should ask the hard questions, interrogate science and sceptics, which is essential to the process of knowledge
 - o Need to move away from preaching to converted, our echo chambers and engage in society
 - o With that in mind, be careful with the internal debate (important to progress of science, but can confuse non-scientists, appear incohesive, uncertainty etc) – small debatable facts can seem much larger in the public arena
 - o Be the voice to inform the views of leaders, politicians, (and deniers) so others can follow
- Push funding bodies to prioritise action, social science, communication (don't we have enough models?)
 - o Recognise that decisions (individual and political) are made by much more than science– comes down to values (economic, political, social....)
 - o Supportive science around the science– i.e. human impact, impact
- Don't waste energy on deniers – focus on action, agency, mitigation and adaptation
 - o Personal, local, national, global levels
 - o Measuring and communicating the relative impacts of our decisions – encouraging a sense of agency
 - o Awareness of mental health implications, eco-anxiety
- Support practitioners with 'Climate Change Communication 101' Resource for practitioners/website? (see resources at the end of this document)
 - o Primer summary of latest research



Rhian Salmon @rhiansal... 29 Nov 2018

And here are the "thinkers"/ researchers settling in to take about how they are contributing to [#CommunicatingClimate](#) [@DeepSouth_NZ](#)



🗨️ ↻ 1 ❤️ 4 ⋮



Deep South Challenge ... 29 Nov 2018

Replying to [@rhiansalmon](#)
And here are the researchers, thinking about what they need and can offer in [#CommunicatingClimate](#)



🗨️ ↻ 1 ❤️ 4 ⋮



- Language use: words to use and those to avoid
- Include principles from risk communication
- See CIA report – intelligence community has great resources
- Royal Society NZ has some great accessible resources

What can academics and researchers offer policy-makers and activists?

- Reliable, available spokes-people
- Credible/useable evidence – that speaks to hearts and minds (need those embedded communicators). Policy inertia can occur without evidence based/metric driven research.
- A reliable information portal, credible one stop shop (common thread)
- Tipping points – i.e. make the science immediately relevant to people
- Policy needs the evidence to be persuasive – an uncomfortable space for scientists as it loses a bit of nuance
- Timescales are a challenge – getting info to the right people at the right time
- Need a think-tank for cross-collaboration - hash out ideas, values, tensions

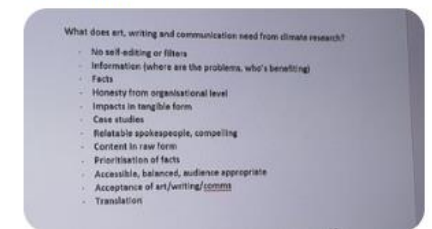
What can researchers and academics offer the artists and communicators?

- Good science communicators (simple language), good people-people (better interpersonal skills) and reliable scientists to be spokes-people and provide expert commentary
- Accurate, accessible and balanced information: data, facts, prioritisation for story, message or communication (science librarian/curator) such as case studies, relatable people stories
- Accessible behavioural science (i.e. to utilise the rise of social marketing for important outcomes)
- Collaboration. Acceptance and understanding of the validity of creative practise in communicating science and its messages (let us sit at the table). Willingness and flexibility to collaborate with non-traditional partners and methods.
- An invitation to work alongside in research projects and budgets – not just an add on at the end of the project. This may include thinking about funding for communication – funders can drive innovation, change criteria etc, funding rounds.
- Ask the right questions!



Dr Rebecca Jarvis @reb... 29 Nov 2018

What does art, writing and communication need from climate research? [#CommunicatingClimate](#) [#scicomm](#)



Ellen Rykers @ellerykr 29 Nov 2018

On emotions in climate comms: concept of emotional flow may be useful – designing messages that take audience on emotional journey. Research showed message of hope prefaced by message that evoked worry was more powerful than message of hope + neutral preface [#communicatingclimate](#)

🗨️ 1 🔄 1 ❤️ 1 ⋮



Ellen Rykers
@ellerykr

Ofc, emotions just one part of framing/message design: huge number of audience, affective & cognitive factors to take into account! [#communicatingclimate](#)

REPORT BACK

RESEARCHERS

- ★ Psychology + Social sciences need to be incorporated
- ★ How to influence Leaders?
- ★ Timing - who talks? When?

- ★ Fatalism + Fatigue we need to change the message
- ★ Role of funding bodies
- ★ We need to enhance understanding of our audiences

- ★ Research needed around
 - Action
 - Agency
 - Social Sciences
- ★ Think Tanks
- ★ Behavioural Implications

- ★ Asking the right questions
- ★ Social marketing expertise is needed
- ★ Understanding our histories, eg. addiction we have to energy (oil) + who controls this

- ★ Legitimate sources for evidence (reliability measures)
- ★ Curriculum development + being a responsible citizen
- ★ Need for usable evidence that's credible

POLICYMAKERS, TRANSLATERS & ACTIVISM

Those hard-workers developing policy inside the system, and those agitating to change it.

Q: How do **policy-makers and activists** contribute to climate-change communication?

There was an interesting tension as policymakers and activists perform very different roles in the progress of society.

Policymakers – those working within the system

- Policy makers have to consider context, can't be single minded, yet need to be informed by single minded voices (like Carbon Zero)
- Creating space for discussion, consultation, disagreement, introduction of topics
- Tends to have a steady as she goes / conservative approach: Practical, implementation focussed i.e. what *can* be achieved, not so much focussed on how to deliver the message so also need aligned communicators
- Some control/influence over resources (i.e. policy makers in government) and therefore agenda setting
 - o Public narration
 - o Advice to ministers, politicians, national leaders
 - o But also serve the government of the day
 - o Accountable to public, political opinion
- Involves making connection across systems – application in real life
- Brings the evidence together (i.e. MFE), and looks for what is missing (intentionally and unintentionally, cant be single minded)
- Offers mediation role - often exemplars of diplomacy as working with competing power dynamics, have to be very diplomatic, unbiased, solutions focussed, collaborative, pragmatic (and from the outside sometimes appear compromising)
- Focus on networking and taking different points of view in to account, then incorporating these points of view to achieve specific outcomes
- Bring context across domains of wellbeing – social, economic, mental, health
- Multiskilled, broad job descriptions
- 'Parent' outlook
- Midway point between science and hearts and mind – putting evidence (hopefully) into action, policy
- Open to negotiation, compromise, to move forward with competing interests
- Often an agenda setting role (i.e. in government) and realise that power and responsibility. Funding policies can drive innovation i.e. goal driven policy change at the Ministry for Business, Innovation and Employment (MBIE) that prioritises Vision Mātauranga has made those goals tangible and a focus for academia – with positive results.



Rhian Salmon
@rhiansalmon

The "raarkers" settling in to talk about the role policy makers and advocates / activists play in [#CommunicatingClimate](#) @DeepSouth_NZ



1:15pm · 29 Nov 2018 · Twitter for iPhone

2 Replies 3 Retweets 10 Likes



Advocates and activists – those trying to change/influence policy outside the system

While our discussion focussed on policy makers, we also had a group of activists, advocates, those who were agitating for change, and these people had clear differences to those working in, say, government policy arenas. Activists:

- Advocates, agitators, activists seek to influence current policy – identify that something needs changing
- Idealistic – working towards a better future
- Change oriented, challenge the status quo, want change faster
- Strong focus on public communication, informing the public, more future focussed, look to the ‘real’ issues, the heart of the matter
- Single focussed – strong voice that doesn’t have to consider the issues in context, OR is considering a certain context
- Future focussed – and imagine a better future
- Encourages open dialogue, disagreement, introduce topics, advocacy – creating space for new ideas, multiskilled space, passionate, strong, good communicators, persuasive

What can the policymakers and activists offer researchers and academics?

- Collaborations can help researchers understanding the policy landscape and the immediate effects of the research
- A future focus to their research - thinking about tomorrow type policy
- Understanding of the history i.e. development of addiction to energy – how can we change if we don’t know that history, choose deliberately
- To initiate 3-way (or more) conversations – many voices/perspectives in the room together (to inform policy, and research to move forward more efficiently and effectively – bringing other communities with them.
- Policy makers need to ask the right/good/difficult questions – to drive research

What can the policymakers and activists offer artists and communicators?

- Acknowledge that Art IS Activism
- Two-way communication
- Representatives who participate, are thick skinned, deliver, honest
- Long-term focus, across and beyond business (quarterly) and political (3-year term) timeframes
- Tangible things to communicate, interesting calls to action. An interesting example is that in Melbourne – the weather man is now giving a climate update during the news
- Policy that prioritises funding on communication increases the effectiveness of the science/research



Rhian Salmon @rhiansal... 29 Nov 2018

Policy makers are asking researchers "are we getting the evidence we need?" #CommunicatingClimate @DeepSouth_NZ



5 7



REPORT BACK

POLICY-ACTIVISTS

- ★ We control the funding + have a role setting the Agenda

- ★ Connect policy makers with researchers

- ★ Funding for Artists

- ★ Fund behavioural changes to help give people a sense of agency

www.campaignstrategy.org

- ★ Portal for information - including behavioural - See Motu household Calculator

- ★ Fund social services

- ★ Link groups

- ★ Future focused

- ★ We are diverse

- ★ Researchers want a Think-Tank

- ★ Climate change as a regular evening news item

- ★ Who is benefiting?


WHAT NEXT? WHERE CAN THIS GO AND WHAT CAN THIS EVENT STIMULATE?

- **NETWORKING:** Delia from Forest and Bird would be keen to build a network/framework of people, to work on big picture climate communication, maybe a collaboration for multiorganization campaign, for some consistency in message and call for action
- **COMMITMENT:** Rebecca Priestley suggested she would like to see some sort of commitment from participants. She recalled a call for commitment at the Transit of Venus Forum, a gathering that brought together about 30 speakers and dozens of others to discuss New Zealand's future, and science, and technology, and innovation.
- **CENTRAL INFORMATION PORTAL/HUB:** Ellie Adams, Royal Society NZ reported a common call of the day for a central portal 'go to' space from a trusted organisation (i.e. Royal Society?) as a platform for awesome resources; calculators, books, psychology research
- **ZERO CARBON ACT INVITATION:** Lisa McLaren gave an invitation to join the Zero Carbon Act <https://zerocarbonact.nz/>, and reminded others that in 2019, they will be pushing for a vision policy for 2050.
- **LEADERSHIP DEVELOPMENT OPPORTUNITY:** Elspeth McIntyre (MFAT) @EllieOnAGoodDay mentioned a recent event she'd attended, an AI Gore (*Inconvenient Truth*) initiative called **Climate Reality Leadership Corps**, focussed on leadership in climate action. Another one will be held in Brisbane in June and is worth checking out, especially if you're looking for a consolidated movement
- **CLASSROOM RESOURCES:** Anya (VUW student) is involved in a Climate Challenge with UNESCO developing new resources for classrooms
- **EXTINCTION REBELLION:** Reminder of a bold movement starting up around the country, in its early stages so policy is still young <https://extinctionrebellion.nz/> but if its your cup of tea, can be a good way to participate.
- **EMOTIONAL IMPACTS / CLIMATE GRIEF:** Christine Thompson asked if others were interested in a collaboration around the concept of climate grief, emotional impact or burnout for those working in this area (another reoccurring topic through the day), in artistic or other methods.
- **NEXT GENERATIONS:** Gabby O'Connor reiterated how important children are to engage with and are often missing from the equation. Children understand what's fair and right, let's not forget them. Don't avoid talking to them – they get it, such as why are there more storms? They will get to make these changes in their lifetimes.
- **COLLABORATE WITH COMMUNCIATORS:** Tim Corballis reiterated the ability of art (all forms of creative communication) to disrupt and offer new ways to look at the world, to break things up a little bit. Artists normally engage with research and policy – tucked into engagement budget. Let us in to your offices and labs – embed our skills where the science is produced, and policy is written.
- **ROYAL SOCIETY TE APĀRANGI ON INSTA** – Ellie's invitation to follow on the new Instagram channel a couple of weeks ago, follow us! But also, we are looking for artists who are willing to share art for that challenge



 **Dr Rebecca Jarvis** @reb... 29 Nov 2018
Tap into peoples values and frames - start with people where they are and work with them. For more info, see valuesandframes.org [#communicatingclimate](#) [#scicomm](#)

 **Dr Rebecca Jarvis** @reb... 29 Nov 2018
Have artists in residence, in institutions, with and among the researchers. Have boundary spanners, connectors, and communicators to bridge research, policy, society and action! [#communicatingclimate](#) [#scicomm](#)

 **Dr Rebecca Jarvis** @reb... 29 Nov 2018
Start with young children - they have't siloed knowledge yet! The kids get it, they understand what is fair and what is right & you can have a long term effect by providing the access point into climate change & what we can do about it - [@o_gabbyo](#) [#communicatingclimate](#) [#scicomm](#)

DID THE COLLOQUIUM STIMULATE PROJECTS OR COMMITMENTS THAT YOU WOULD WANT TO PURSUE?

We received wonderful responses to this question in the follow up survey:

- I am involved in a number of groups already, but I have begun communicating with voices from the media and hope to expand this. Would like to collaborate with others from the conference on this too
 - Great to meet others working in this area and became clear there is more that can be done to help everyone in these topics. Would be interested to be involved in future projects, and for us all to share more of our own experiences and top tips with each other that are specific to climate change comms and specific to New Zealand
- engage Space Place and Museums Wellington in Climate Change communication
- Not sure yet - as I am mid a very large CC communication project. It is more that I know that I am on the right track and am thinking about how I can expand the project/reach both in people and geography at the next stage
- Working with Deep South more closely
- Involvement in a couple of different NGOs, involving climate change Because we are already doing climate comms on a daily/weekly basis my aim is to get others from the workshop interested in what we (and others also working in this space) are doing. There seemed like a bunch of people interested in starting this work from scratch for the sake of it. It would be a much better use of time to build off the skills and experiences of those currently involved and go from there
- Reminded me of importance in considering issues involving different 'civic epistemologies' eg: NZ, Australia, US, Europe etc. and their influence on policy formation and how this fits with making policy involving global relevance
- To further our informal research into better creative engagement practices. To create more online content and share this with others for communicating science information
- Too mad to even discuss here - an anarchistic plan with an artist. Hard to define
- I am hoping to work with a young artist I met at the colloquium on an ocean plastics project next year



- exploring different ways of communicating, working with others
- Would like to get together with participants again to develop consistent comms messages and to workshop ideas.
- I did make some connections that will be useful for future work in this space
- Communicating climate change through arts and mātauranga Māori lenses
- Podcast on climate change and how this will affect New Zealand, particularly the fauna. I was already committed to a few projects based around the communication of climate change for 2019 and 2020. The colloquium helped with knowing who I can contact if I need help or advice on some aspects. It also reinforced the importance of these projects and motivated me to try to make them as effective as possible
- In my current role, where I work alongside young people, developing more collaborative and more opportunities for them to be able to explore, understand and take action around climate change and sustainability generally. It has also made me think about I approach my climate change communication. At the moment I tend to communicate it as a 'thing' that needs to be resolved but if I approached it from the perspective of sustainability and generally part of a more holistic situation where I communicated from a perspective of actually just living in a way where we consider the impacts of our choices on the environment and make the choices accordingly this in itself would create climate change actions.
- Awareness that all the information on climate change and all the resources are very scattered and hard to find and they need to be collated into a central accessible place
- Embedding art in corporations as a way of emotionally engaging with climate change
- Desire to defeat the filter bubble, and engage with and understand the perspective of those resistant to accepting the risks and urgency of climate change
- learning more about the environmental processes in climate change, and monitoring/connecting to them.

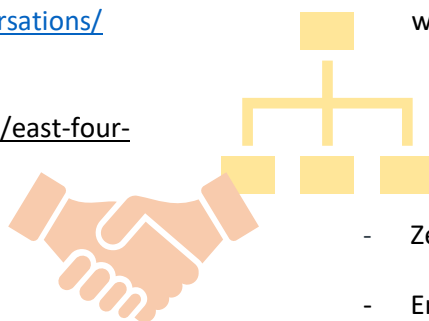


PARTICIPANT RESOURCE RECOMMENDATIONS

These resources were recommended by participants (either during the day or via the post-event survey) as useful, helpful or relevant to conversations at the colloquium. We hope these provide some useful information or ideas about new ways to communicate.



- Royal Society Te Apārangi— implications for new Zealand’s natural resources includes infographics <https://bit.ly/2HMkU4Y>
- New York Times: *A New Climate Tipping Point* in podcast form www.nytimes.com/2018/10/19/podcasts/the-daily/climate-change-un-report-carbon-tax.html
- Design exhibition dowse.org.nz/exhibitions/detail/this-time
- Megaphone podcast *Science Vs* Election Special: Climate Change megaphone.link/GLT5445198852
- Carbon News (carbonnews.co.nz) is read by policy makers and business and is a useful media outlet for people working in this field
- NIWA’s Our Future Climate NZ ofcnz.niwa.co.nz/#/home
- There’s a range of resources at Climateoutreach.org website and on Twitter @climateoutreach such as blogs, resources, events and training
- Working together on climate change <http://cambridgecarbonfootprint.org/carbon-conversations/>
- Behavioural (psychology) insights <https://www.behaviouralinsights.co.uk/publications/east-four-simple-ways-to-apply-behavioural-insights/>
- Climate Visuals, an evidence-based image library that better convey the impacts of climate change rather than industrial smoke stacks climatevisuals.org
- Carbon Conversations carbonconversations.co.uk
- Common Cause Foundation valuesandframes.org - a must attend for climate comms
- This is essential reading for understanding 'value modes', and how, in comms, one size doesn't fit all campaignstrategy.org/chris_rose.php
- Climate Comms theclimatecommsproject.org
- climatestrategies.org is an independent, not-for-profit organisation that aims to improve policy in the fields of climate change, energy and sustainable development
- #take3forthesea online campaign is a good case study for a simple idea gaining leverage with the public
- Sell the sizzle not the sausage’ - excellent narratives, style and communication tools at Futerra.com, imagining a better future and working towards it wearefuterra.com/work/interface/
- Carbon Conversations carbonconversations.co.uk
- Climate Cloud climatecloud.co.nz/Pages/default.aspx - collation of land-related climate research
- Zero Carbon Act zerocarbonact.nz
- Engaging with differing values in our climate communication, action, and advocacy campaignstrategy.org



- For simple messaging that suits younger/less confident/sci literate audiences climatekiss.com also on Twitter @ClimateKISS
- From Bridget Williams (printed) Books: Bronwyn Hayward's BWB book *Sea Change: Climate Politics and New Zealand* and Jess Berentson-Shaw's book *A Matter of Fact: Talking Truth in a Post Truth World* are great places to start.
- Teaching resources on the Resources for Rethinking webpage: resources4rethinking.ca

- NASA have some good teaching activities online for schools/teachers: www.jpl.nasa.gov/edu/teach/
- The Irish school system has an initiative called Green Schools which has proved effective in engaging children, schools and communities to take action: greenschoolsireland.org



Finally, our thanks to:

Victoria University of Wellington for providing the lovely venue, Sarah Searancke for the amazing vegetarian food in sustainable packaging, all the facilitators and participants named in this record, all the supporters and contributors who helped and who aren't named here, the Centre for Science in Society and Deep South National Science Challenge for being great teams to work with, Matt Scott who effortlessly handles everything we throw at him and Linda Gilbert, our lovely graphic recorder and from Drawn Together.

But our gratitude goes especially to the participants, the doers, the rarkers, the policy-makers and system workers, the activists agitating to change the system, the narrators and storytellers, the anarchists and the rule followers, the artists, writers, academics, researchers, comms advisors and everyone in between...

...who work tirelessly to make this world better for future generations. We hope you have been inspired, encouraged, enhanced and well fed.

He waka eke noa, we are all in this together.



Dr Rebecca Jarvis

@rebecca_jarvis

. @rhiansalmon wrapping up the @DeepSouth_NZ Climate Change Communication Colloquium! Thanks for a brilliant day Rhian and all the organisers! #CommunicatingClimate #SciComm



Linda Gilbert - Drawn Together Ltd

@Graphicscribe

Our day is over, but really it's only just begun. Great cross pollination of researchers, artists and policy makers all looking to make meaningful climate change. #communicatingclimate @DeepSouth_NZ



Farewell

HAERE RA

COLLOQUIUM on COMMUNICATION

about

CLIMATE

CHANGE

29 November 2018

National
SCIENCE
Challenges

THE DEEP SOUTH
Te Kōmata o Te Tonga

