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COMMENTARY

Climate change: A *Wumpurrarni-kari* and *Papulanyi-kari* shared problem

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SQ & NFJ: We are two men around the same age, not yet 50 years old, both born in Australia. One of us is Wumpurrarni, a First Nations man of the Warumungu people of Tennant Creek and the Barkly region of the Northern Territory, Australia. The other one of us is Papulanyi, a non-Indigenous man from Sydney, Australia, descended from Irish and English ancestors.

We share a deep friendship and a shared concern about climate change – the way it is already impacting the lives of our children and our grandchildren. We are worried about climate justice and the ways climate change will grow the already big inequity between Wumpurrarni and Papulanyi even more than it is now, with our children and future generations, who have contributed least to the problem, being hurt hardest.

NFJ: We Warumungu people all go right back thousands of years living on this *Manu* [country]. Our connection goes all the way back in time – stretching right back to where we are all from. There is a deep thing called *Ngurlu*, our marker. My *Ngurlu* is from my great-great-great-great grandmother. Nobody can argue with *Ngurlu*, because it tells us where we are from, who we are, how we are related to each other, and it goes all the way back.

SQ: Today, we all share this country, and in Northern Australia, the profound new heat of climate change is reshaping everything.

NFJ: Climate change is like a fire that Papulanyi [started and we need to put it out]. If not, we will face the consequences, whole families, the whole world. It'll sing [kill] us all. Wumpurrarni [First Nations] do not like what Papulanyi have done to the land, and to our health.

SQ: For First Nations people in the north of Australia, living with heat over thousands of generations has shaped cultural and knowledge structures in ways that are so old they tangle with genetics.[1] *But recent years have brought new extreme heat, which is destroying ecosystems that have long been the foundations of life, and wellness of this land (*Fig. 1*).*

Communities in the north of Australia already have significantly higher heat-associated mortality than their southern counterparts,[2] *and we are only at the beginning of a long journey into this new climatic age.*

Without factoring the impact of future climate change, remote-living Aboriginal children born today have a life expectancy that is already 14.3 years lower than the national average.[3] *To understand how climate change will affect the wellbeing of these children as they grow older, current circumstances in their communities need to be acknowledged for the threat they represent.*

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NFJ: We've got to talk about the past, about the present and about how it affects our future. We've got to talk about truth telling, including how racism and colonisation affect our lives today.

When Papulinyi talks to Papalinyi [a non-indigenous person with a grievance negotiates with another non-indigenous person, using western legal frameworks to resolve the circumstances], he locks it in. That man who is listening puts it in his head, and he makes sure he does something about it.

But like the old Blackfellas say, when Wumpurrarni talk to Papulanyi it goes in one ear and out the other. When it comes to climate change and our children, this is not good enough. Papulanyi must hear us and act.

*SQ: In contrast to Papulanyi/Western people, who have developed an almost complete multi-generational divorce from the outside world as if it has no relevance in day-to-day existence, Wumpurrarni/First Nations people of northern Australia live in socio-cultural harmony with the environment. This is not some kind of romanticisation of more wholesome times of the past. It is real today and it is lived. Warming of the climate was recognised by Wumpurrarni people, independent of Western scientific reports (*Fig. 2*), decades ago. It was recognised as a unidirectional phenomenon that was changing many aspects of an interdependent ecosystem upon which thousands of generations have relied upon for life.*

NFJ: Papulanyi in cities do not see the country dying like we do. In the cities, they do not see Nature. They see walls every day, they see green parks, and they have running water all the time. They do not see creeks that only run once a year. In the city, they know that beach where the waves are flapping every day. They do not see it change. Not like us, we see our rivers and creeks rise up and down. It might look good this year, then next one it's no good. We see a change because of weather over different seasons and years, but now we can see big changes over the last 30 years.

On a really hot day, we would stay right near water. We would sit right on the side in the shade all day, do not worry about working during the day. We'd hunt or set traps in the evening when it's cool and get it early the next morning.

Now we are just watching these hot days that are getting hotter more often and for longer. Finding a cool time and place is getting harder. It's getting too hot for Ceremony. Ceremony is all about keeping things level, between people and country. Now it's getting hard to find a safe time and place for young fellas to go through Ceremony, a place and time when it's not too hot. That's not healthy for our people or our *Manu* [country].

In a mining town, like Tennant Creek, we have seen that the Papulanyi way is to rip the ground, dig up the ore, cart it away to another country. All that's in their heads, and in their eyes, and what they see in front of them, is dollar signs. But Wumpurrarni,

Fig 1 'Peering' by Rupert Betheras and Fabian Brown. 'The artists looking into the future – 10,000 years ago Indigenous people of Africa and Australia discussing the way of survival games and supporting younger generations about maintaining their abilities surviving in the arid desert where food is scarce'.

we do not see dollar signs. All we see is our country and what is happening to it – it's getting destroyed but we want to make it get better.

And now the country is burning, getting destroyed, because of climate change. Already, I cannot see sand goannas any more. They've gone now. Even after that recent rain they did not come back. And the little lizards, we do not see them running around the desert ground any more. We have not seen them back. We have not seen many kangaroos lately. We are worried that they are going. Bush turkeys too. They are really poor now, and not really healthy, not fat. Now, [after the years of extreme heat] what can we teach our children when the *Manu* [country] is poor and animals are missing?

SQ: Remote First Nations people will not thrive in a warming future world when the simplest of problems have remained profoundly neglected, when their circumstances of Western poverty have even been weaponized against them.[4] *For remote-living people, existing as second-class citizens, poverty and poor health are a daily reality.*

We do not need sophisticated Western research to understand how, in the tropical north of Australia, diseases of poverty linger in a household of 20 people who live in a poorly constructed two-bedroom dwelling that has no air conditioner or fridge. Truth-telling that recognises the baseline of injustice that causes sickness and disease is required, as existing inequities are the foundations upon which new extreme heat will fall.

NFJ: If the Papulanyi does not move on the issue raised by another Papulanyi, then he'll write him a letter or send him an email to remind him. Then the person responsible has to move, and if he does not move he knows he'll get in trouble because that's going to go higher, going to go further. Second time it's a warning, third one it's a strike. Because that's Papulanyi law.

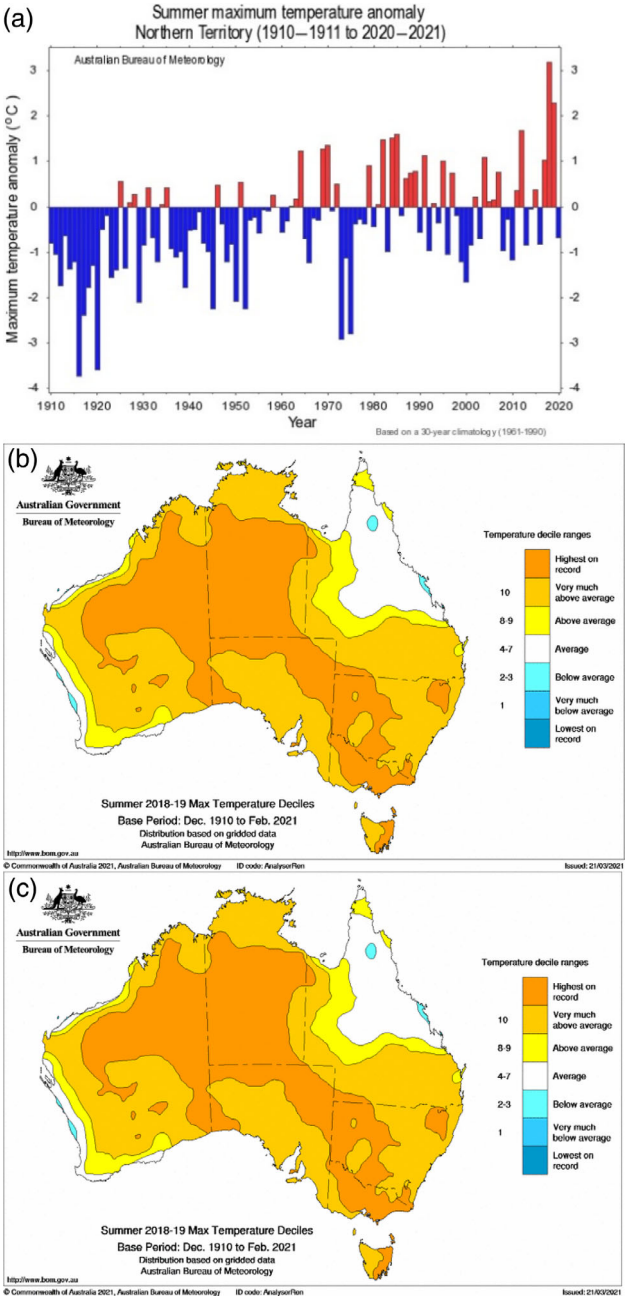

Fig 2 (a) Northern Territory annual average daily summertime maximum anomaly compared to long-term average daily summertime maximum, 1910–1911 to 2020–2021; (b) Temperature extremes of summer of 2018–2019; (c) Temperature extremes of summer of 2019–2020. [Courtesy of Dr. Pandora Hope, Bureau of Meteorology.]

But for my people it's different. Wumpurrarni can talk as much as he likes. But the Papulanyi responsible never listens to him. It's in one ear and out the other. That is racism and it's killing our people.

SQ: There are always two sides to the stories of this colonial inequity at the heart of the foundations of contemporary Australian society. For

instance, in Central Australia, John McDouall Stuart is celebrated in Western history as having been a courageous gentleman and 'explorer' who crossed Australia from south to north in the 1860s. He is not celebrated by First Nations people of this land he once crossed – Pitjantjatjara, Luritja, Arrernte, Alyawarre, Anmatyerre, Kaytetye, Warumungu – who have heard their grandparents' stories of his gun-dealt violence.

When he arrived on Warumungu land, despite his guns he was turned back by a strength of force by Warumungu people at Attack Creek, 100 km north of Tennant Creek in the Northern Territory. The Western story recounts how he bravely fended off violent savages who did not want him on their land. But for Warumungu people, the story told is dramatically different. A distant train of camels was seen coming like string over the barren sandy horizon and misinterpreted as a huge serpent approaching from a very long way off. When it invariably arrived at the waterhole that attracted its thirst, where the attack occurred, it can only be presumed that the white-skinned men, shrouded in leather hats and shiny black boots, draped in strange cloth, riding on the back of huge humped beasts, were even more threatening than a serpent.

NFJ: My old fella told me a story his old fella told him. When McDouall Stuart was coming, they thought he was a big rainbow serpent coming down from the hills. When those camels were coming all in a line, they thought it was a big snake, and they thought it was going to attack. They did not want it to attack or come to the water. He helped himself to our precious water without asking permission.

SQ: The structure of First Nations knowledge is verbal and ancient. In parts of Australia, volcanoes exploding 15 000 years ago still exist in human minds, stories have been accurately passed from person to person through thousands of generations. There are people who can still describe the hunting habits of Thylacines [Marsupial tigers, now extinct] in Arnhem Land 3000 years after it disappeared from that ecosystem. First Nations hold knowledge that reaches back into lived experience of other massive shifts in the global climate – the only such knowledge still in existence.

NFJ: My father said to me: 'You will not stop learning. You will learn every day for the rest of your life'. Wumpurrarni people can teach Papulanyi how to look after this country better than anyone else. We have looked after it for thousands of years. People used to know – do not go there, do not do that because you are on someone else's country and you might hurt it.

If you do the wrong thing you are in big trouble, you will face the consequences, you will be a dead man walking. And it is still the same today. If I accidentally light a fire and I cannot put that fire out and it burns someone else's country and their sacred objects, then you are in trouble. Climate change is like a fire.

SQ: White invasion, colonisation, consumerism and a growth-addicted economy has effectively lit a fire on someone else's land that we cannot put out. We are all in trouble. The first step for Western people is to listen and to believe what they hear, to recognise that as a society with foundations in Western science we have great weakness in listening to, accepting, or learning from other cultural paradigms.

NFJ: In my home town and in my town camp, the first thing I would like to see is a healthy place for children and families to live. I want to see proper houses and shade where we live. I'd put in housing, playgrounds and streets with shade over them, and plenty of water fountains with solar power to make cold water on a hot day. Around our town and living areas, we need little shady rest stops everywhere, and parks with big shady trees, so people have somewhere to go to sit down and play when it's hot.

SQ: There's a park in Alice Springs just like this vision, opposite the Hospital, that offers lawn and shade. In this park there is a 20-ft statue of McDouall Stuart, erected 7 years ago by the Freemasons to commemorate 150 years since his arrival. He stands proud and stern at the western edge of the park, holding a huge bronze rifle as tall as an Wumpurrarni.

NFJ: There are always Wumpurrarni people in that park, waiting for their families whilst they are in Hospital. McDouall Stuart's standing in that park today, and that is racism right there. That man, and other Papulanyi who followed him, shot our people. You cannot see a statue of an Arrernte man standing in that park holding a spear or woomera [spear thrower], do you? But Arrernte have been in this country for thousands of years before McDouall Stuart turned up. People need to see the true story of this country. We need truth-telling. That will help us heal our trauma.

SQ: The barriers of adaptive change to global warming that racism throws up are not imagined in towns like Alice Springs, Tennant Creek, or across the Northern Territory and Australia. The forces of colonisation continue and institutionalised racism leaves more destruction.

In towns like Tennant Creek, Alice Springs and Katherine in the Northern Territory, there are families with children living outdoors in corrugated iron tin sheds, behind windbreaks, in tents, and in poor quality housing year-round, surviving through extreme heat, many homeless with no chance of getting a climate-safe house. Some are even picked up from their camp and delivered to the air-conditioned renal dialysis centre three times a week.[5] Doctors prescribe cholesterol-lowering tablets to people who regularly go hungry. Young people suffering from diseases like bronchiectasis and rheumatic heart disease come to the end of their short lives without ever having lived in an environmentally safe home, a living space that most Australians take for granted.

The solutions for remote-living First Nations people are not Western biomedical, they are much more obvious than this. Whilst western medicine has a place for remote-living people, when it comes to climate change, it has no role and risks distraction from the blatantly obvious work that urgently needs to be done to prepare.

What needs to urgently happen can be found by asking First Nations residents of towns and community living areas on town camps on the fringes of many remote Australian towns what they need to prepare for longer, hotter summers.

Houses offer environmental shelter to extreme weather events, but implementation of effective housing policy and programmes since colonisation has been an appalling story. Rates of homelessness in the Northern Territory far out-shadow all other states. Katherine [a town 800 km north of its neighbouring town Tennant Creek] has a homelessness rate 31 times the national average.[6] Housing stock is outrageously inadequate, poorly designed for the local environment, uninsulated, often profoundly overcrowded. People live in extreme energy insecurity, with the cost of electricity impacting available family income for food and other essentials. Not even reliable running water can be assumed. A Besser block structure with no eaves is as good as it gets in Tennant Creek town camps.

NFJ: Before, I used to live in a tin shed [*A space literally made of uninsulated corrugated iron and nothing more, a structure that some residents still feel lucky to reside in*]. But now, that iron, it is too hot, it is like an oven, you cannot even stand in one now on a hot day.

A safe house should fit in with our climate, where we are from. What I want on a hot day is a fan, a fridge, safe, clean, reliable water and shade. I'd have a house up on stilts, so the air could go through, a breeze-catcher, I need solar power on the roof, so I do not have to pay for electricity. That's all we need. That's all you need when it's really hot – not a tin house.

SQ: Other foundational institutions that are necessary for preparing future generations for a hotter world, such as education, require much more work balancing out cultural requirements that empower communities as they see fit.

NFJ: My kids have connections from two First Nations – two sides - Alyawarra and Warumungu. I want my children to learn three worlds – from their mother's side, from their father's side, and *Papulanyi* side [a Western education]. It is really good to learn their mother's side, really good to learn their father's side [and Western education is important also].

SQ: What is the role of doctors in this complex space that is not western biomedical?

NFJ: Every doctor has got more power than anyone, they have got more power than me. A doctor has more say, and a stronger voice, than anyone in our community. We need a Wumpurrarni voice that is stronger and louder than doctors, and a seat at the decision-making table, to make a healthy future for our children.

We also have our own First Nations science that teaches us how to live on this *Manu* [country]. It needs to be acknowledged, respected, and taught alongside Papulanyi science.

SQ: When it comes to using our collective voice within our own professional domain, an undeniable truth, when it comes to climate change, is that we are all a part of the problem and the solution. Health care in Australia emits 7% of the nation's entire emissions.[7] *Leadership in mitigating is a powerful statement to the communities from which we all belong. Green health services and hospitals, powered by clean renewable energy rather than fossil fuels, will help lead green industries. If we do this and loudly demonstrate our actions and successes, this is a voice that can potentially reach to the remotest corners of the planet.*

But from a remote Indigenous perspective, it all comes down to fierce and fearless advocacy for climate justice, advocate for an equity that still does not exist for many people in this country let alone for future generations of children. And as doctors, we have an absolute obligation to use our privileged voice, because it works.

NFJ: Doctors have to help Wumpurrarni shake the bush – make a strong voice. It's same for getting food, like from the conker berry bush [bush plum], that grows a black berry. You put a tarp up underneath, and if you want to eat conker berries you gotta shake that bush. When you shake the bush, the fruit hits the ground. That's how we get the government and Papulanyi to listen to us – shake the bush till the fruit hits the ground.

Wumpurrarni are here to protect our families. Every Wumpurrarni is the same everywhere, and so are Papulanyi. When it comes to climate change we should all be strong voices working together – for healthy country, healthy communities, healthy children.

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