



THE UNIVERSITY OF BRITISH COLUMBIA

**Centre for Sport and Sustainability (CSS)**

School of Kinesiology

### **CSS Podcast Season 1 Episode 1 Transcript**

[AB] Welcome to season 1, episode 1 of the Centre for Sport and Sustainability's podcast series. I'm your host Andrea Bundon, an Assistant Professor in the School of Kinesiology at the University of British Columbia and a member of the CSS leadership team. The title of this episode is 'Green Games', 'Carbon Neutral Games', 'Zero Carbon Games', 'O<sub>2</sub> Plus Games' – since when did the environment become an Olympian? In bidding for the Games, potential hosts make claims their events will be 'green', 'carbon neutral', or even 'environment enhancing.' In this episode, we will explore the history of how the environment is considered or not considered in bidding on and hosting sports mega-events, and also this trend to 'out perform' previous hosts with the claims made. It will specifically explore connections between the environment, development, unequal power relationships and social justice.

My guest today is Dr. Liv Yoon - Postdoctoral Research Scholar at the Earth Institute & Mailman School of Public Health at Columbia University. Welcome Liv.

[LY] Hello! Thank you for having me here.

[AB] So, when and where did this interest in the topic of the Olympic Games and the environment start for you?

[LY] It, I would say it started from a combination of things. I find social issues surrounding sport mega-events fascinating. It's wild how these issues can go unnoticed, or perhaps more accurately, pass as 'benign' or innocuous because of their association with sport or leisure or entertainment in general. And being in beautiful Vancouver with all its mountains and oceanside glory throughout my grad studies, I've had the privilege of spending a lot of time outdoors, which naturally led to an interest in environmental studies and environmental issues. So when I heard that this once-protected mountain was being razed for the 2018 PyeongChang Winter Olympics, I wanted to find out more. It certainly was also a helpful coincidence that it happened to be in South Korea, where I was born and speak the language.

So, this research led me down a path of studying socio-environmental issues more broadly, eventually, including climate change, which I – which is what I study now. And, I would say my background in sociocultural kinesiology has informed how I approach studying climate change-related issues now. So in other words, with the understanding that bodies exist in social and political context, we can think about why and how some bodies are considered more disposable or worth 'less', and hence, end up being more exposed to pollution and other environmental and climate-related risks.

[AB] So it was when you were learning about what was happening with this mountain in South Korea – and we are going to discuss that particular case in a lot more detail in just a bit – but it was hearing about that that set you on this path to exploring these issues. And, tell us about what you found – what is the link between the environment, climate change, social inequalities and the Olympic Games? And if you could also address a bit of what I talked about in the intro, that trend in hosting these Games to make these increasingly ambitious claims about how ‘green’ the Games are going to be.

[LY] Sure. So, a little background beyond sport mega-events I think is necessary here to talk about this link. So starting from the 1960s, environmental movements have been increasingly gaining traction and in 1987, we have what’s called the Brundtland Commission Report, also known as ‘Our Common Future’, which informed the United Nations’ official sustainable development goals, or the SDGs as we often hear. And this report is the framework for how we use the terms ‘sustainability’ and ‘sustainable development’ today, I mean we see those words everywhere – and that there are three pillars to this sustainable development: there’s economic, environmental, and social, and that they all go hand in hand – and I’ll come back to this later. So, this is around the time people start to really pay attention to the words ‘global warming’ and ‘climate change’ as well, because with, you know, scientists like James Hansen of NASA testifying at Congress in 1988 that the warming trend isn’t natural, but it’s actually caused by humans. So there’s real momentum building and many international organizations are joining this ‘save-the-earth’ bandwagon, and the International Olympic Committee – the IOC – is one of them.

So in 1994, the IOC adopts the ‘environment’ as their third ‘pillar’ of the Olympic movement. They have these pillars, so the environment is the third one after sport and culture, so they’re, you know, indicating that they’re really serious about this. They also decide then that all candidate cities for the Games, both summer and winter, should have their hosting plans formally evaluated on environmental grounds. So this is when we start seeing host cities come up with slogans like the ‘environmental Olympics’, the ‘green games,’ ‘carbon neutral games’, so on and so forth.

All of this serves the IOC as their response to this ‘gigantism’ that they’d been accused of – this notion that they were requiring host cities to expend vast amounts of resources for just this one-off event. So, you know, it becomes an answer to the criticisms that they’re getting. And most importantly, by having this response, they can carry on their business as usual, which is to continue the Games and gain profits from having corporate sponsors and broadcasting rights.

And, while these big promises and declarations were made by the IOC and each hosting city, what actually unfolded is quite different. So each successive Olympics became larger in scale, in spending, and accordingly, in carbon emissions than the previous one. Infrastructure-wise, there are stadia left to waste and rot – literally rot – and, you know, ones that were built after protected forests and ecological reserves were cleared and people and animals displaced as a consequence. Organizers promise to use the Olympics as an opportunity to do mass clean-ups but never deliver because there’s actually no form of accountability, as was the case in Rio in 2016 as a famous example, the water in Guanabara Bay. Meanwhile, carbon emissions are skyrocketing with athletes and tourists flying around the world, and spectators as well. And companies like BP and Dow Chemical are gaining social capital because they’re partnered with

the IOC as their official ‘sustainability partners’, and carry on their toxic, extractive, and polluting business as usual, while having this green banner around them because they are called the sustainability partners.

Most recently, the IOC announced in March 2020 that the Olympics will become what they call “climate positive” from 2030. I’m not claiming here that everything they say is a lie; I don’t think that people in the IOC actively want to destroy the earth. But whether this really is a priority like they say it is, is questionable. For example, on this press release, it says: [quote] “The IOC is already a carbon-neutral organisation, having offset its 2017 to 2020 emissions through its carbon partnership with its Worldwide Olympic Partner Dow” [unquote] - there’s a lot of irony here because as many probably already know, Dow Chemical is a multinational chemical corporation, the largest in the world along with ExxonMobil and Germany’s BASF. Most importantly, they were responsible for the Bhopal disaster of 1984, considered one of the world’s worst industrial disasters. There are multiple numbers from different reports over the years, but the death toll is at least 3700, to as many as over 16,000 from this one incident.

And, to return to this “climate positive” claim from the IOC – they say that they’ll achieve this by carbon offsetting and, you know, offsetting more than 100% of its remaining carbon emissions, and we hear this word a lot in many of the hosting cities. They’ll be, you know, ‘carbon neutral’, they’ll offset all their emissions and in this case for the IOC they’re saying that they’re going to do this through the Olympic Forest project, which is part of this ‘Great Green Wall’ project, which is an existing United Nations-backed initiative to combat desertification in Africa’s Sahel region. The thing is, all of these announcements sound great – things like “offsetting all carbon emissions” sounds really good and responsible, and noble. But the truth is, carbon offsetting doesn’t really work like a math formula. And Dr. Brian Wilson breaks this down thoroughly in his book *Sport & Peace* – but I’ll just mention one of the critiques here. Say you get carbon offsetting credits for the forest that you’ve cleared to build a highway – that accounts for the trees that you’ve cleared to build that road at that time, but that does not account for the emissions from the cars that will continue to come from driving on that highway for who knows how long.

And there are also other promises, like using hydrogen-fueled vehicles, Olympic medals made of recycled mobile phones, and podiums made of plastic waste donated by the public – and they again sound really good. But again, they’re all based on the assumption that the Games will go on. It sure makes the public feel like the IOC is on their side, that they really care about the environment, and that they have things under control. But in reality, these are distractions I would say, kinda like flapping a towel at a burning house with one hand while taking a blowtorch to it with the other.

And I should add here that these critiques are well-documented by other scholars like Drs. Helen Lenskyj, Jules Boykoff, Brian Wilson, Graham Hayes, John Horne, and also Shawna Lawson just to name a few whose work I’m familiar with.

[AB] Your example there of building the highway, and being able to purchase or offsetting credits for that highway but then not accounting for the emissions of the cars that are going to continue to use the highway, that reminds me of another critique of the Olympic Games and specifically how the issue of legacy in general has been conceptualized within the Olympics, that

the cost of the Olympics and the legacy of the Olympics and the impacts of the Olympics, it all really depends where you set the limits on measuring those and what you choose to include and what you choose not to include. So in this case, choosing to include perhaps the infrastructure but not the long-term use of that infrastructure – it's very similar to, when pricing out the Olympics, do we include the cost of building that new airport runway, or do we say that airport runway was going to be built anyway and therefore it's not a Games-related cost.

[LY] Exactly, yeah.

[AB] So this strategy of using climate positive claims has been going on for a while and, as you say, is systemic and deeply intertwined with how the IOC operates and how they were responding to criticisms about the increasing demands placed on host organizations. Now, in your PhD work – and we should mention that you actually did your PhD in Vancouver at the University of British Columbia and were a member of the Centre for Sport and Sustainability where I now work – you looked in depth at one specific case and that was the gap between what was promised and what happens on the ground. Can you tell us about Mount Gariwang?

[LY] For sure. So my dissertation was about a once-protected mountain that was partially bulldozed for a one-time event, the Olympics, and a failed attempt to save it, and how different groups of people responded to this issue, and different groups of people being journalists, activists, and local residents who used to live around the area. This mountain, Mt. Gariwang, was formerly a legally protected area, warranting the highest degree of protection for endangered species and ecosystem vulnerability. But when PyeongChang won the bid to host the Games, this mountain was chosen to be the alpine venue. And the organizers made promises that the forest will be fully restored afterwards using the best available technology – that is, if it was decided that the ski venue will not be kept open afterwards – a decision that still has not yet been made to this day. So there was, of course, resistance from many environmental and civic groups, especially because there were other ski hills nearby in the area that could've easily been used with a few slight modifications, and also because the IOC said that any venue within the country, or even in neighbouring Japan, could be used rather than building something completely new. But ultimately, the venue was built, along with a main registration building, two hotels, parking lots, and access roads. And as a result, the mountain was partially bulldozed, the ecosystem destroyed, and a small community of people who lived around the base was displaced – among them, those who owned land were compensated to go elsewhere, but tenants who were renting were just kicked out with a nominal moving fee.

And, when I say all this, I want to be careful here to not paint a black and white picture as if this development was something that was purely forced onto the locals. It wasn't, and that's what makes the issue a lot more complicated. Many locals wanted the development because of the economic promises that were made by the organizers. And of course they have a right to economic prosperity just like everyone else does, and particularly more so in this region that's largely been left behind compared to the rest of Seoul – or rest of South Korea – I say Seoul because some of the residents called Korea the Republic of Seoul, the capital city. So, the issue here is that the development was communicated as if razing this mountain to build a ski venue was the only way for them to get this economic and infrastructure development that they wanted.

And now, more than 3 years out of the Games, the ski venue is just sitting there, it's closed but it's not necessarily being restored either, it's just kind of in purgatory collecting dust, and there's still conflict over whether the venue will be kept or not, while the locals aren't benefitting from any economic boost. They saw a slight increase in tourism during the Games, but this remote area just remains rarely visited.

[AB] And you produced a documentary based on your PhD work – Mount Gariwang: An Olympic Casualty – and I'll just mention to listeners that the film is available on the Centre for Sport and Sustainability's website and I would highly encourage people to check it out. But one of the concepts introduced in that film that really intrigued me was 'post-politics'. So we're going to listen to a clip from the documentary where Professor Wilson – director of the CSS – explains what post-politics are.

[BW ] One of the great ways to actually generate consent for a particular kind of event or a particular kind of decision that actually might be controversial is to make people feel like they've actually had a say or they can actually participate in dealing with some of the ramifications of this decision. The key here though is that the most contentious decision has already been made, which is the building of that stadium or the holding of all these events. They call this post-politics because actually, the genius here in terms of actually generating consent, is to make the real decision background, that decision's already been made, don't worry about it, but hey, you can be involved in some of the smaller decisions about actually how we're gonna hold the event or how we're going to build the facility. So this is actually after the contentious politics piece which has been sort of buried in all of this.

[AB] That was Professor Brian Wilson giving an explanation of post-politics. Now, Liv, could you maybe provide us with some practical examples of how 'post-politics' played out in the context of PyeongChang and the decisions made around this mountain?

[LY] Sure. In the context of the PyeongChang Games, the decision to use Mount Gariwang as the alpine venue – that decision had already been made. So calls to use other existing venues were dismissed much earlier on. So within this parameter that the Games are going ahead, and this mountain will be used for the venue, the organizers gave the locals and groups that opposed the development a say over smaller decisions like agreeing to merge the men's and women's course to decrease the felling area, but the big decision of using this mountain was just the baseline that they started from.

[AB] So the locals are engaged – but they're engaged only at the point where the decision has already been made.

[LY] Exactly. So they, yes, had a seat at the table, but the table was already set with limited options, and those options only; and bringing in a different item to the table was out of the question. But because technically, the organizers opened the table up to the locals, they could make the locals feel like they had some agency, which is an insidiously effective way to go ahead with their grand plan while keeping resistance down to a minimum since people feel like they've had a say.

[Andrea] I have to admit, I love your analogy of the table already being set with limited options because, I'm a parent of a toddler and I think we're all very familiar with that strategy – you ask your toddler if they want, you know, cucumbers or carrots for dinner instead of asking them what they want to eat. You limit their options right from the start, and it is a way of getting consensus. So, it seems to me too that in addition to post-politics and this strategy of only engaging various stakeholders such as the local residents after the big decisions have been made – there's something really interesting here about how that very notion of 'sustainability' has been taken up in the context of the Olympic Games and the hosting of mega-sport events.

[Liv] Absolutely, I think the very notion of 'sustainability' itself is an example of post-politics. This dominant triple-pillared rendition of 'sustainability', this idea that we can have it all – social, economic, and environmental progress – that, you know, what's good for the economy can also be good environmentally and socially, that we don't need to give anything up – this idea is really useful when you want to keep doing what you're doing, and continue turning profits without making any sacrifices. So when the IOC and local organizing committees take on this sustainability language, it allows them to appear as if they are focusing on the environment, but more than that, it's a way for them to continue what they're doing – to continue the Olympics, contract out a whole bunch of development that benefits a few elites, and garner profits from broadcasting rights and corporate sponsor money while dispelling criticism because now they have something they can point to, this shiny blue green pamphlet that lays out how committed they are to protecting the earth. So, sure they've set out some environment-specific criteria for hosting cities, but it's all still within the parameters of 'the Games will go on.'

[AB] Here again is Dr. Brian Wilson speaking about how this triple-pillared approach to sustainability has been taken up in the context of hosting sport mega-events and why it's so effective.

[BW] I mean, you can see why this sustainability approach is so appealing. I mean, if sustainability is about economics, social, and environment coming together, and you think about how this is actually operationalized when you talk about it in terms of holding a sporting event or doing business, you have businesses that are motivated to create and sell green products to consumers who demand this. So you actually have this interaction that actually results in something that can be good economically and underlying all of this is you're actually doing things that are good for the environment. Who can't be for that? Of course there are problems with this in a sense that businesses, while they're motivated to create green products in some ways, what they're really motivated to do is reach their bottom line. This is where greenwashing comes in, it's not to say that there aren't excellent businesses out there that are doing pro-environment work, but the incentive system isn't necessarily lined up perfectly for this to take place, and we do know that one of the ways that sustainability as a concept is exploited as prioritizing economic sustainability. So although it is a really compelling storyline and one of the things that makes it compelling is that we can all be winners in this, we can all keep generating products because we're going to be innovative and doing so it's going to make us money, it's gonna be good for the environment, and it's good for people. Not everybody actually agrees that it plays out that way, so maybe we're not all winners.

[AB] And this definition of 'sustainability' has become very popular in the context of hosting the Olympic Games because it allows groups – such as those bidding on the Games – to present a

vision for hosting that includes assumptions that holding the Games will result in social, economic and environmental legacies for the host community?

[LY] Exactly. When local bidding committees try to garner local or domestic support for the bid, there are big promises made as to how what they call ‘Olympic legacies’ - whether in the form of an alpine venue or new highways or new hotels – how they’ll be beneficial to the locals. These promises were made to the locals in PyeongChang and the surrounding region as well. They really sell this idea that the Olympics are a great – and often, the only – way to get all this economic and social development while also bettering the environment somehow, even if that involves destroying it first. And sometimes, people really do have a reason to believe this if their area has been left behind the rest of the country because it’s rural. Regardless, records of past events tell us that these promises are rarely kept or grounded in evidence.

[AB] So early in the process there is this promise that we – and by we – I mean industry stakeholders, local residents, or even local environmental ecologies – are going to benefit. But then as the process moves forward, as we go from bidding to hosting and then post-event – economic priorities trump other priorities – and particularly, they trump environmental priorities.

[LY] Mhmm. And what is delivered once the Games end is quite different from what was promised. And tied to this is this concept of ‘ecological modernization.’

[AB] Ecological modernization – can you tell us more about that?

[LY] Yes, although I think Dr. Kyoung-yim Kim, an Assistant Professor at Boston College, who has focused on sustainability and environmental policy in the context of the Games, would do a better job. So, here is Dr. Kyoung-yim Kim explaining this concept.

[LY] Hi Dr. Kim, thank you for joining us. Can you tell us about the concept of ecological modernization?

[KYK] Sure. The basic premise is that environment and environmental problems can be fixed by humans, science, and technology. So once you are convinced by that ecological modernization rhetoric, then it's easy to develop precious nature and it's easy to see these environmental problems because 'our cutting-edge science and technology will fix it.' That is the fundamental premise of this environment modernization discourse.

[AB] So ecological modernization then is the idea that we don’t have to really worry about our impact on the environment because we can innovate our way out it? That human intelligence and cutting-edge technologies are going to save us from doing any true or lasting harm to our environment? What does that have to do with the Olympic Games?

[LY] Well it ties into the concept of post-politics in that it allows stakeholders in the Games to do what they always intended to do but while promising that the negative effects of their decisions will be mitigated through technological advances. So it’s a form of insurance if you will to back up their claim, saying “oh yeah, we are going to go ahead but don’t worry, we have a plan in mind, we have all these technologies available to fix problems should they arise”. Dr. Kim has actually written about ecological modernization in the context of the Winter Games and

specifically, the justification for the construction of sledding tracks used for luge and bobsled. And I spoke to Dr. Kim about this work.

[LY] Could you tell us more about ecological modernization through the context of Nagano and PyeongChang? Specifically, we were wondering how have the plans for the venue construction for sledding tracks been justified?

[KYK] Well, indeed, sledding track cases in Nagano and PyeongChang Games can help us better understand the concepts ecological modernization, and post-politics in Olympics. The two cases actively addressed some environmental issues with the cutting-edge technologies, at the same time the development of the conserved mountain areas was rationalized by the advanced science and technology innovations. And also, selected scientific committees and advisory boards framed certain ecological problems and solutions around the Games; however, those framed environmental focuses are not necessarily the local areas' primary concerns. So, all these ecological modernization approaches and post-politics around the sledding tracks reveal how the sports we play and watch now is closely linked to human and environmental health or ill health.

[LY] Hmm I see. Could you tell us more about some examples and details of this so-called 'cutting-edge' technology?

[KYK] So, here is the details. For those who are not familiar with winter sports: the sledding tracks are a sliding track facility for bobsleigh, luge, and skeleton events. It is a gravity-powered tobogganing at Olympic level. The track course travels around 1,500-meters in length, with an average of 130-meters of vertical drops. So, you can imagine it a mountain-size ice roller coaster. So this sliding track has been the center of environmental problems and consequences in many Winter Olympics so far. Making the Olympic-size track is a large-scale infrastructure undertaking. It involves extensive road constructions, reshaping of a whole mountain from top to bottom, and most notably, it uses environmentally dangerous chemicals for making iced surfaces. For a long time, many ice sports have used Chloro-FluoroCarbons as refrigerants, and we commonly know it as Freon. This Freon-use in sport began to be phased out under the 1987 Montreal Protocol because it causes ozone depletion and was substituted with "less harmful" chemicals like ammonia. Ammonia coolant is less harmful; however, the excessive amount of ammonia use as a refrigerant in an outdoor mountain area can be a disaster to both environments and human health. The toxic ammonia gas leaked in the 1992 Albertville Winter Games in France; and from there, the IOC – the International Olympic Committee – and the local Olympic hosts prioritized managing ammonia in sledding track as part of their sustainability efforts. And – tada – Japan in their 1998 Nagano Winter Games made seemingly impossible things possible. Japan invented innovative indirect icing technology and constructed their sledding track using only 1 ton of ammonia, whereas the conventional European system uses 60 tons. Nagano earned green technology patents in their track construction and claimed their sledding track as the "most environmentally friendly track in the world."

2018 PyeongChang Games in South Korea also made a green innovation in the construction of their sledding track. By automating track framings, PyeongChang radically shortened their construction period. They took roughly one-tenth of the time it would've taken in Europe. Reducing construction time not only saved costs, but also reduced carbon emissions. This

emphasis on decarbonization in sledding track construction was part of the PyeongChang Games' environmental vision, that was "Low-Carbon Green Games."

Along with these technocratic inventions, both Nagano and PyeongChang Games also modernized their environmental governing structures and introduced standardized green certification programs like using recycled or upcycled construction materials.

[LY] Wow, that's a lot of inventions. So, you know, some might hear all of this and say, "all of this sounds really good, what's the problem here?" What would your response to that be?

[KYK] All of those sound great, aren't they? However, they are not great under certain contexts. The local Nagano communities and the Japanese environmental NGOs suggested nature conservation as the most important environmental concern, much more than reducing the ammonia usage in the sledding track. Also, it turned out that the indirect icing method was not a great solution for Japan. Probably some of you know, Nagano is the Southernmost city in Winter Olympic history so far. So, making and maintaining snow and ice for Olympic competitions was critical, but the indirect icing was inefficient to keep the surface iced. PyeongChang's case was also highly problematic for different reasons. PyeongChang could've used the sledding track in Nagano or could've purchased the construction know-how instead of building the track from scratch. The desire for building Olympic legacies for their own interfered with making the rational policy choices. And the decision-making processes were undemocratic in PyeongChang's case as well. The corporate actors for the construction – for the track construction – had autonomy while residents and environmental NGOs in Korea could not participate in any occasions once the construction started.

[LY] I see, so while there's no question that reducing ammonia usage in Nagano was great, that still doesn't change the fact that the Games took place in the southernmost city in Japan, resulting in a lot of environmental harm through things like making and maintaining snow and ice. And then decades later in PyeongChang, even though Nagano had already developed this technology to reduce ammonia use, PyeongChang's desire to create legacies of their own made them forego the more environmentally friendly choice, especially because decision-making was so limited to those who had a vested interest in building everything new and using their own technologies. So what do you take away from these two cases of Nagano and PyeongChang?

[KYK] Well, the two of Nagano and PyeongChang's sustainability approaches around sledding tracks were narrowly focused, showcasing standards and compressed reform of green policies; so, as some scholars call it, it was ineffective, and short-term, "fast policies." I believe the quantified and standardized ecological modernization rhetoric would continue to dominate environmental discourses in the Olympics and sports in general, if the local realities are continuously ignored and narrow, and short-term focuses are conveniently selected.

[LY] Those are great things to look out for in future Games. Dr. Kim, thank you so much for your insights here.

[KYK] Thank you for having me.

[AB] So where does that leave us? I'm assuming that those who have already been awarded the Games – so Beijing 2022, Paris 2024, Milan 2026 – they're already at that point of post-politics

that you spoke of. The big decision – the decision to host the games for example – has already been made. But not all the plans are in place – is there still time for stakeholders to mobilize and have influence on *how* the Games are delivered particularly with regard to environmental impacts? I know you spent a lot of time on the ground in Korea in the lead up to PyeongChang – what lessons did you learn there that could be useful to those who want to make sure that something like Mount Gariwang or the sledding tracks in Nagano – that those situations don't repeat?

[LY] Yeah, this is an important and really tough question I think. I don't have perfect answers, nor do I think I'm in a position to dole out advice. But at least to answer partially – yes, I believe there's still time for various parties to mobilize and inform how the Games are delivered, and many are already doing this work, like the NOlympics group for LA, and civic groups in Tokyo. Because what I found through my research was that communication really mattered – as in, how the Games-related developments and destructions are framed can really legitimize something that should've never happened – in this case, the development of Mount Gariwang was you know, communicated as the only way for the locals to get the development that they wanted. So I think it's useful to pay close attention to how promises are made and what assumptions underlie them and how they're justified. For example, asking questions like “is there a blind faith in human ingenuity and technology to reverse environmental damage” is a helpful question to ask. And also, particularly to the local stakeholders, to ask, are the Games being sold to them as the *only* way they can get the development that they wanted? And what are the parameters of options being given to the locals, and who decides on these parameters? And is there room for alternatives? You know, especially with the IOC becoming more lenient in a way for candidate cities because the interest in bidding has dropped so much, they're doing things like allowing for sharing of venues – domestically and internationally with neighbouring countries – so there really is no excuse for an organizing committee to say that they have no choice but to build completely anew.

[AB] You raise an interesting point there, I mean early on we talked about how a lot of this 'greening' of the Games was driven by the IOC and sort of the demands they were placing on host cities. But in the last, I would say actually only the last couple years, we have seen a change in the IOC's approach to soliciting bids – there has been less demand or fewer cities prepared to bid on the Games – and the IOC has responded by being, as you said more lenient about opening up other options. So, that will be something to watch in the future.

But those are some suggestions there about how we might think about the Games being delivered in a way that is less harmful – that does open the door for other alternatives – but as you've been saying all along, you know, the decision to hold the Games is rarely itself questioned. What are the other alternatives and how can we go beyond sort of like, minimizing damage once big decisions are already made, to thinking about a truly sustainable Games? Or if that's even possible?

[LY] Mhmm. Yeah, I think this is another really important and tough question and it's hard to know what the right solution is, especially when considering, you know, the athletes who work all their lives towards going to the Olympics and who am I to take this away from them. But there's gotta be a way to have this level of competition without all the collateral damage that I think dwarfs the glory derived from athletic accomplishment. So some have suggested that the

Games be held in one place repeatedly, or the flipside of that suggestion is to hold a “decentered” Olympics where different cities simultaneously host different events, so depending on which cities have existing infrastructure for certain sports. The assumption here is that these places already have infrastructure to support the Games. That said, as long as there is athlete and spectator travel involved, unnecessary carbon emissions are inevitable. And also, some oppose this idea because they truly believe that the Games are a great leverage to give a place a boost, and even though it’s diminishing, there is still plenty of soft power associated with hosting these of spectacle events, so it’s really hard to say what the right alternative is.

And you know, say we somehow do address all the environmental impact issues – there are still human rights violations and other atrocities associated with the Games, and obviously not just the Olympics but also the World Cup and other sport mega-events, so the environment certainly is not the only dimension to consider when thinking about how sustainable these Games are.

[AB] Hmm, I’m going a little bit off topic here and I’ll mention that at the time of recording this we are about 40 days out from Tokyo I think, and there’s big, big questions about whether or not the Tokyo Games are going to go on. And if they do go on, who is going to be in attendance, it doesn’t look like it’s going to be international spectators and there’s a lot of teams who are questioning whether or not they’ll actually travel to compete. But, you know, there is some irony there that a Games that’s potentially at the stage of collapse might actually be our most sustainable Games yet –

[LY] You’re right!

[AB] – drawing on local audiences only, the smallest team size possible. Yeah, it does make us think differently about what the future of the Games is.

[LY] Absolutely. That said even, I mean, in terms of like spectator travel and carbon emissions on that front the Tokyo Games may be the most sustainable ever, but you know, people have already been displaced from their homes to build stadia and there are also reports of – I mean – Tokyo, the committee, has admitted to how they have sourced from protected rainforests in Indonesia for building material for their stadia, so...

[AB] A lot of harm’s been done and yet, the benefits that could be reaped like the economic benefits of tourism are not going to be realized so...

[LY] Exactly.

[AB] Huh, yeah. It’s a tricky one to see what the end balance sheet will actually look like.

[LY] Mhmm. I mean, who knows what’s going to happen, there’s still 40 days – it’s a fast changing world, especially with COVID.

[AB] This has been a really fascinating conversation and I know the next time I hear an event claiming they’re going to ‘go green’ or even be ‘environment enhancing’ I’m going to be looking at that claim from a much more critical perspective. But before you go - I have one last question. As I mentioned in the intro to Season 1 of this podcast – one of the catalysts for our podcast series was that we just passed the 10<sup>th</sup> anniversary of the Vancouver 2010 Olympic and

Paralympic Games. Vancouver, you know, we already said – we’ve both lived here – it’s a region that you mentioned is near and dear to you, it’s near and dear to me, and we’ve both spent a lot of time in these mountains and beaches and forests. It’s been in the news these last couple months that maybe Vancouver should be putting in a bid for the 2030 Games... how do you feel about that? And what would you personally be looking at in a bid plan to either ensure that the environment is being considered or to decide if the Games should return at all?

[LY] Yeah...how do I feel about that? I have mixed feelings. The realist in me says, ok, the Games probably are not going to be cancelled within the next decade, so if they’re going to be held anywhere, they may as well be somewhere that already has infrastructure to support it, which Vancouver does. That said, before any bid even starts being prepared, or we start thinking about environmental impact, it should be up to the Indigenous groups native to this land to decide whether we even try or not. As listeners to this podcast may already know, Vancouver is on traditional, ancestral and unceded territory. And for this reason, ‘No Olympics on Stolen Land’ was a common anti-Games slogan in 2010 and leading up to it – so with that as a baseline. But say a bid does get put in – I’d be curious to see who was consulted, whether existing venues will be used, whether anything new is being built, and who the sponsors are, and whether they have something more solid in place than carbon offsetting to ‘cancel’ their footprint. And also, whether there’s any reckoning of all the unkept promises from 2010 and how those are being addressed. And truth be told, even with all of these in place, I’m not sure that I would support the bid...to be honest.

[AB] Well thanks so much for joining us Liv. It’s been a pleasure to speak with you and to hear about both your past research and how we can use this past research to consider the future of the Olympics in the context of the environment.

[LY] Thanks is all mine, thank you for having me.