Transcript: Inclusive Spaces: CurrenSee - An inclusive attention economy

Explore data representation and the socio-economic inclusivity of non-human vantage points and volatile urban environments.

**SUMMARY KEYWORDS**

Inclusive Spaces, urban environments, artificial intelligence, built environment

**SPEAKERS**

Provides Ng, Ya Nzi, Artem Konevskikh, Daniel Fitzpatrick

**Daniel Fitzpatrick**: So, welcome everyone to the Bartlett Inclusive Spaces talk event, we will start in about five minutes, I will let people join. And I’ll leave this page up for the moment, thank you very much.

Great! Good afternoon, welcome to Inclusive Spaces we're going to start the session shortly. Welcome everyone, welcome to the Inclusive Spaces seminar series at the Bartlett the Faculty of the Built Environment here at UCL. Today you have joined the April edition of Inclusive Spaces. So, welcome I’m Daniel Fitzpatrick I’m a lecturer and teaching in planning at the Bartlett school of planning UCL and I’ll be hosting this session of Inclusive Spaces, is our monthly seminar, led by the Bartlett equality diversity and inclusion group where we're showcasing the latest research and ideas from world leading thinkers on all dimensions of diversity in the built environment.

So, before we begin a little housekeeping this session will be recorded and added to the Bartlett UCL faculty of the built environment YouTube channel. The Bartlett EDI website that's the equality diversity inclusion website and it will be forwarded to the registered attendees. The format for today is I’m going to first welcome our guests, to present for the first half of the session and that will be followed by a Q&A Before ending promptly at 2pm.

We encourage you to submit a question for the speakers at any point during this lecture by clicking on the Q&A function on the bottom of the screen, you can submit your own questions or upload others so I’ll be scrolling through and presenting those questions as they come up at the end today it's my pleasure to welcome my colleagues from the Bartlett school of architecture Provides and her collective Current collective made up of Eli Ya Nzi and Artem.

Current is a collective of architects, researchers, artists, CGI and animators, engineers, data, scientists and programmers. And their digital practice is driven by an interest in the reciprocal relationships between the virtual and physical spaces. They will present to us their current research on how technological ideas such as live streaming culture, volumetric reconstruction artificial intelligence Ai and personalization might act as socio economic drivers to change in how we circulate values in the attention economy a digital currency, so to say, so I will hand over. To Provides, thank you very much.

**Provides Ng**: Hi everyone nice to meet you and welcome. Thanks for joining this session. And let me just quickly share screen, yeah so we're the current collective. First let's meet our team, so hi I’m Provides I’m currently a lecturer at the Bartlett school of Architecture UCL.

**Artem Konevskikh**: Yeah so, my name is Artem and I’m not a scientist, but still I work and teach artists how to use, how to implement neural network and their artistic practice.

**Ya Nzi**: I am the engineer and as Daniel mentioned a lot of different intersections, different fields we have anything but as you may see it's not a lot of people there, on the other, so each of us are sharing a lot of different knowledge in our brains so yeah. I’m actually I’m an engineer related to robotics and complex motion department. And yeah after I went to contemporary art direction, meanwhile, I was practicing my effects and 3D animation skills, so all these combined in our research.

**Provides**: Yeah unfortunately Eli can't join us today because she's in La and we're all spread across different time zones. But now let us go to the four core ideas to actually make up current, including follow metrics, cinema attention economy, digital persona, and environmental sensing. So, we're really interested in speculating on what would happen, and what this future may look and feel like at the intersection of these ideas. And the unique question that we're dealing with is that, in an increasingly digitized age, how can we bring inclusivity into our spatial design and how can individuals present themselves in such spaces. And inclusivity in design comes from an understanding of what diversity in communities, so this highlight is another kind of being able to understand the relationship between governmental sensing and human representations. Our participatory cinema is an experimental film about how the different perspectives information sources and conflicting values might synthesize into new ideas in an increasingly seamless open source and three-dimensional media environment.

**Ya**: So, yeah which forms like extended architecture field like not only physical architecture, but also information architecture and communication architecture so.

**Provides**: Yeah exactly. So, how we like to do things is that we will like to lead our work speak for itself and then afterwards we're going to elaborate a bit more on the idea. And we will be in a discussion together afterwards sure now someone will play the film, it will be around 11 minutes.

**Provides**: Great so that was the film, I hope the experience was smooth and you had a great journey, yeah so, the theme that would like to talk about today is participate or you cinema and what do we mean by that. Well in the film, you might have noticed that we have a few ideas, for instance, how different perspective may help us and reconstructing the world's much like households with imagery work, and then we call that blockchain cameras in the sunset and our camera may authenticate events and truth amongst themselves. At the same time, we're interested in nonlinear narrative in the sense that when our world is not anymore, a montage cut from frame to frame but we're going into extent or realities of world two worlds users may be able to navigate the world's and the narrative on their own pace, so in essence user participation and attention generate the cinema through their interaction with a 3D environment.

**Ya**: And it forms this smooth seamless experience, as you may see from our film like it's uninterrupted one version shows flying from different worlds, different events, and different perspectives. So, that's what we try trying to show through the effects when camera shifting and showing other parts of the same event.

**Provides**: Yeah, so in a sense, we really care where we really are questioning is on data representation, so our thinking behind is that, as opposed to ask users or inhabitants or citizens as passively collected data patterns by centrally managed platforms, is there a way that we can have decentralized data collection, in a sense that every sort of sense of voluntarily contributing data to a common data environment. Problem is authentication of truth, but then, at the same time for the participation in that the data may assist the design and planning of the city in future. Yeah, another thing that we really care about is the inclusivity of different vantage points not only humans, but also nonhumans.

So in the movie we try to collect a lot of data from the live streams of animal cams, and these include bear cams or even the horse cams and by no human intervention these cameras capture data of the natural habitat where the animal is living and in 2019 when we were making this film, one of the bears was eating trash in the landfill site, because they were really starving due to climate change, and we were able to put that also in the cinema, but in a form of reconstructive environment, so we reconstructed the landfill site we reconstructed the forest now, we also reconstruct at the path that the polar bear took during the live stream.

**Ya**: Besides, like animal perspectives, we also had some like massive environmental perspective cameras like looking at Amazon forest or some Arctic places and the thing was that it's hard for the human perception to actually just sit and spend their time just watching this so that's where we're talking a lot of the natural processing of that kind of like spatial temporal data to condense it in something meaningful for the recipient.

**Artem Konevskikh**: Yeah like it's impossible to look at the like how the planet is changing like, with your own eyes, but with the help of remote sensing like satellite imagery, for example, some can track this process, and you can walk into these processes in like human understandable times, paths you know, like there is quite a lot of examples of this time lapse of the earth changing, and you know also like Ya Nzi mentioned this neural processing of that kind of data. I think the neural networks can help us a lot to look at the open environment at the earth's environment from non-human point of view, because we can use like we can reconstruct environment from videos or from photos or satellite imagery as well, and then we get this 3D environment which can be a concern in its own turn. Like understand it by like segmentation neural networks and we can understand which object in this environment means what like, for example, we can reveal these animals, or I don't know cars or buildings and we can use this data to look at the environment from the point of view of this object so it's not on the animals not only humans, but also like known objects as well, so.

**Provides**: Yeah we were really thinking that a network of artificial intelligence will actually enable and a distributed learning networks amongst. A network of humans and machines and during the movie we also test a lot of defects, and we really question with artificial intelligence and with all of the participating data, the more resolution we get we also get better technologies in deep faith, but also in hyper real. So hyper real was basically adding an additional layer of information on to reality but does fake and real really have such a clear boundary between them? Aren't they actually informing one another in terms of technology advancement, but then also if a type of real it's also fake right so yeah those are some things that we care about.

**Ya**: A lot of questions about like how developing truth authentication and the others is like truth modification making mechanism itself so development so, we were really interested like what it may result in and yeah how this modified world like.

**Provides**: Yeah, last but not least, we have the idea of micro licensing and currency which is really what we want it to question today is that all the attention economy is generated. Based on these animal cams and based on a participation of citizens, how do we actually directly generated value to follow town environments in need and can we basically have a form of licensing the license the animal, so that every time it gets future every time its 3D model get used we generate value through that and then we feed that back into.

The preservation of nature, but that actually also provide monetize the problem because nature doesn't really care about money, or it cares about is for us to leave them alone, so the attention value generate It really is to help us leave nature alone.

**Ya**: Yeah, that's why we have samples of how to convert attention into value and back in the days in 2019 and we were thinking about still floating and Closing with the projected danger, the environment and species on that so that helps to kind of navigate the that attention and then so it's this is how more or less currency may work yeah.

**Provides**: So, in the last part before we go into the discussion, we would like to show you are inclusive workshops in a way we like to practice current not just as one cinema, but we really want to exercise the participatory nature of current So what we did, is that we standardize our production pipeline and we made it easy accessible to everybody, including artificial intelligence and other computer graphics animation yeah… So, these are the workshop that we've been doing internationally, but also interdisciplinary a lot of the participants and students, you see they're actually not from views of architecture or urban design, some of them are from human-computer interaction, some of them are from graphics design or data, scientists and other fields.

**Ya**: Yes, it's also a continuation of inclusive it's we’re talking about because yeah, we were trying to make this like framework as inclusive as possible, so that's why we were not going deep into some hard coding or something and we use open source software to expand the brain of our students and to continue to imagine and thinking, the world.

**Artem**: I think you already said what I wanted to say the Open Source like nature of this workshop so it's basically, it's not about the pipelines that we designed, but it's the way, how we can like think very flexible very like adjust the pipeline, according to our ideas and not like to stuck on the same software that we don't some time ago, and like experiment with some very emerging technologies like neural networks, or we are or something yeah so it's always Samson you think we teach and approach to it system.

**Ya**: So, each group actually came up with their pipelines.

**Artem**: I think it's more like they have this basis of the tools that we are sharing, but as soon as they want to like show their ideas like. They always win the fight and some of them at it's new to some of them use the same tool sets everyone, but in completely different ways so it's always something new, even for us. We all learn from our students.

**Provides**: Exactly yeah and also in the middle you'll see some students from bartlett school of architecture, you should have regen so background and they're actually students from the program in RC14 and that particular class, we were actually discussing attention economy and now they're making urban design project based on the value of attention, economy and how to actually translate that not just in the digital domain, but also in the physical domain, like, for instance, what are the corners to our attention, leave the most and how to make use of those corner to actually project information in the city, so that we can inform citizens of let's say, climate change or other types of information.

**Artem**: Through me and some other colleagues of mine, we also made about not an attention economy, but on this topic of how we can take the data from the lunch landscapes and use this data to finance these landscapes also April last year.

I guess it's so how close and also in Boston yeah, so you probably can find this.

**Provides**: Yeah so, these workshops are all free and open to all every city, we go some of our participants had zero experience in programming or computer graphics. This basically show two things that first are additional pipeline and interface have been assigned in a democratized way with open-source tools available for any individual. And second that our participants are the most brilliant in that they're really collaboratively resilience and persistence, as they all have to work in teams of four and they've never met each other before. Ryan to myself okay so they're co creativity proof anyone can be an active contributor and idea cedar citizens are no longer passive consumers of architectural design and services in the age of the digital and the multimedia and we communicate through mass participation. So just wanted to show you kind of the pipeline that we actually teach we usually teach some of the workshop or like a few days, some of the workshops are over two three weekends. And participants are able to generate output from using Ai generated a text to inspire them and then they would bring the text on philosopher ball, so we also suggest to them, so, in a sense, is extracting intelligence from history, and also from giants and then step two, we will be using your networks to generate this persona and we use Ai to generate a Digital Avatar in the sense that you know, there are topics and data surveillance or data privacy, so if you want to represent yourself in the digital space diversity. Without with a pseudo anonymous identification, then you might collaborate with Ai to generate data representation of alternative forms.

**Artem**: Yeah, I think this part will be updated very soon I’m working on right now, so to generate like it will be even more automated and customizable yeah.

**Ya**: To add we go this workshops and like will read blue magic cinema or imagined persona and it's also provokes the students to think about because volumetric cinema is actually not something that already formed and has its boundaries yet so we, together, together with the students, we were trying to actually understand how it may look like and what actually and it's meanwhile the metrics in mind what is what's the new rules was maybe and how to break the rules that don't exist, for example, and didn't exist before.

So yeah, actually it's workshop which also forming some field which like did not exist before And, as also expands the mind.

**Provides**: Yeah, we really wanted to develop that digital literacy and the criticality together with our students. And yeah, so like, for instance Arc TIM is the artificial intelligence guy per se and he would be making interfaces for all the algorithm so students don't actually need to learn how to code, but then we also receive questions from students sometimes saying that because they're not scripting the Ai from scratch, he or she doesn't really know the so much or they don't know how to collaborate with the Ai. But then actually what we must remember that we are architects and urban designers and other discipline we're not all computer scientists. And our job, sometimes it's just to find application use cases or urban problems that actually are really in need of our attention, and we must collaborate with other talents like programmers, coders, makers. Computer graphics animators so no one knows everything like collaboration is actually the key.

**Artem**: Yeah and I think it's always like this kind of collaborations bring interesting points of unique view because, like technical guys, like me, we are like very deeply into technologists but be realistic about like critical part of this because it's interesting to implement some feature but like the understanding of where it goes after we release it it's

like not always on my on our minds, and this is why it's useful to like work together with the people from other disciplines because they instantly can say like I can use this to in such and such ways, and this can lead to decent these circumstances so it's like very great like very useful to go direct to both sides yeah.

**Provides**: Yeah, and maybe the last thing is just to say that we're very lucky current because we met each other as for Strelka Institute and we've been working together for three four years and running just on passion and open source resources, with no supporting funding at all, and sometimes we get invited to exhibit and museums, for instance, this is our last exhibition at the Rijksmuseum in Netherlands. And sometimes they would give us artists fee, but that it's really based on the passion of us working together as a collective and at the same time we're really blessed in the sense that we're able to connect with the international community, through this exhibition so it's also a way of collaboration through the medium of cinema, to give effective and in immersive communication meets.

**Ya**: Yeah exchanging.

**Provides**: Cool! So, if you would like to join our workshops and connect with us or discuss with us, you can also follow us on Instagram which is current.cam and we're happy to talk anytime. So now we welcome any questions, I think you can turn on your camera us to talk, or you can just type them into chat.

**Daniel**: Brilliant, thank you very much Provides and the current team, there is a couple of questions I thought that was an amazing insight into your work and, especially, as an artistic practice but also a deep social, environmental, critique and also a sort of propositional angle to it so proposing this these new forms of engagement with the environment. At the sort of virtual and real level there's an interesting question that popped up when you were talking about human and non-human, but the focus on the human pips asks do you think this process because assist in giving designers of the built environment, a better understanding of the barriers different disabled people face, and I suppose, in addition to disabled people that's sort of physical disability, but the sort of neuro diversity as well, so I was wondering how have you come across ways of working with disabled and neuro diverse people.

**Provides**: That's actually a great question unfortunately throughout the feel workshops that we've conducted we so far haven't had any participant in that sense, but maybe we also need to reflect on ourselves, so why that was actually such a case, and I think the point on neuro diversity is actually a brilliant question.

**Ya**: And, of course, this what is good about that framework is, it reveals to you, as other perspectives on that, no matter what perspectives you watch but it's I think it makes it more obvious more feasible, maybe yeah when you for example, trying to explore the architecture of some building or building to in in that way, because you I think instantly and notice a lot of things that in your ordinary life you never think about, but in that case you immediately can explore that and like feel and understand and improve in final yeah.

**Provides**: And maybe also one thing one thing to know is that I think it's a great question but a social problem ultimately needs to social solution the technology that we're introducing is just a means for us to explore together. So, the key is participation, like, for instance, throughout the workshops their friend cultural and disciplinary people working together, communicating together and that's also a way to actually understand each other beyond watching just a film as well.

**Daniel**: On the public good participation, you mentioned a felon was asked this question you mentioned participate with data generation and you touched on these concepts such as the fake Ai and the hyper real selling wonders how the intersection of these concepts would inform the Navigator us in the artificial world and the example given is fake data generation by contributor, for example, and the effect of that data when it is used by user.

**Ya**: it's what we were talking about like 10 minutes before it's there, the answer is it's an open question yeah because we live in that situation of really high place developing information systems and information generation Commission collection information modification and it's always happening when you deal with acknowledged knowledge, it can be bad can be good and can split and do different paths routes like at the atomic energy and nuclear bomb. And they are evolving together and the how actually they may interact and how to prevent some face, because in some cases fix our room yeah like if you're doing something today entertainment content or it's a way to convey your idea but.

So, not all information should be like 100% proof and real and other can other way yeah it's like politics and stuff that and when at this field, the face appears appear may cause a lot of problems that's why a lot of programmers and developers working on the algorithms and mechanisms to actually catch the fake or no, how to how to deal with this space and separate them from the actual information.

**Daniel**: Yeah and I suppose the fake is the production that comes out of the data collection and I suppose the question was referring to when you have this decentralized data collection, then there's obviously a sort of triangulation going on to make sure that the data is, as you say, like what's the truth out there and to triangulate through different ways of collecting the data.

I think there's another question that's related to that from rishi who's who asks how you think the participating model works, considering the digital divide. And I suppose slightly related is, if you see that there is a different interaction pattern between developed versus developing countries and that kind of touches on both your sort of your theme of digital literacy, but I suppose yeah just going to the heart of how you how do you deal in your work with the idea of the digital divide.

**Provides**: interesting. I guess, first, I would question the concept of developed and developing country I attend a lot of foreign symposium international conferences that now refer them as global North and global South, but if you also look at how they set the boundary it's not geographical global north or south it's a sort of let's say economy or cultural, political global North and global South and, interestingly, obviously, you will see, most of the western country in the global north and the rest of the world in a global South and I will say that actually now we're in a world system that perhaps we should focus more on the flow, as opposed to identities, so there will always be a constant exchange because of different fields level like energy level like entropy right, so if we keep labelling that certain countries or less develops, then, in a sense, we're also discriminating ourselves with another.

So, the whole current idea about this is about data transaction is about flow wits about more exchange, as opposed to labelling.

**Ya**: For example. The developed and developing countries also interesting question terms of how fast Internet is working, for example in in Russia Internet is faster than Europe and works with more and because Europe has the infrastructure before has to develop and when you are building something from scratch is like faster and cheaper in a way, and here is new it's a lot of it's like non-linear. In that case, in case of how you can use technologies, how they actually work and it's not all the time connected with this status. The relevant and developing sounds and you know, like a lot of countries started to use the cryptocurrency as their currency official currency and it's something that, for example, Europe, it's like hard to make a decision so fast, but some of them are already using it.

**Artem**: Yeah so sometimes like being a developing country gives you this like possibilities to use new technologies like to implement new technologies faster than you can do it in the developed countries and also like I always think that and think that the limitations gives you like this additional like struggle to make something new, something like developed some like new approaches to the things, and in that case the developing cultures like have this advantage. Because you need somehow to like find the way to access the Internet find the way to implement these are the that technology in a very limited like resources and think it's like I think Like the things that we are discussing and current they're not like about like they're both worldwide in any country.

**Provides**: I actually think Richie is asking a very, very important question here that it's really startled us because it's such a big question in terms of equity diversity and inclusion on the country scale and, of course, current isn't going to solve this problem. Because it takes the entire planet to do it, but I think it's a very important question to think about for us, obviously current tech some more self-organization approach so what it does is that it makes things easier to use, accessible and just put it out there for free so then people who cannot afford the market entry costs can even can also participate, but if a certain contexts that certain urban context is in such poverty that they can even have Wi-fi Internet or phone then maybe the more urgent question it's to solve foot hunger or social mobility and other types of social problem that obviously technology cannot solve on its own.

**Ya**: But on the other way is like maybe it's not always but it's how your institute's working for example hunger problem, maybe not shown your country yeah because government is not what I want you to see that they have some problems and in terms of Internet and freedom of speech and Freedom of exchanging information, even if you're not taking the main channel like TV channel and say Oh, we have hunger problem here, but in terms of communication people can organize together just with messengers and may actually have to form a force to affect the gallon and so it's yeah it's a complex process.

**Daniel**: I think I suppose there's a here is as a question of sort of. A differentiated access to the actual hard infrastructure that is needed, and then we can have a sort of discussion about there's also the global South in the global North and. And, and these sorts of discussions, but I think what you're pointing towards is these operations that are much more about open source and decentralized. And how the infrastructures can develop to to incorporate these ways of working that are about decentralization and as you said, like looking into planning into the future with infrastructures that can allow for these decentralized ways of operating, and I think that's really fascinating.

I suppose one question I had is just touching on your intersections of various knowledge is do you feel there any missing disciplines that your collaborators collaborate and can draw on and maybe there's some people in the audience that can join in.

**Provides**: Oh, nice question, yes we're always looking for collaborators participants welcome any idea yeah thanks for that question, Daniel.

**Ya**: We are facing some other planes and, of course for example, with we don't really have somebody who work closer with the environment and nature conditions and it's like another field of research, we can feel this we can research Internet and find the problems here and there, but rational people dealing with great.

**Daniel**: Thank you I’m going to wrap up now sorry after you had the point. No, so I’m going to wrap up there, and thank you very much for joining us everyone and a big thank you to the current collective Provides, Eli, Ya Nzi and you all, for your time and thought-provoking presentation. Just to announce inclusive spaces is back on Wednesday 11 May and we're going to touch on the first question that we had so the title is mental health and social justice in urban outdoors with Dr Liza Griffin from the from The Bartlett Development Planning Unit and Kay Pallaris of Mapping Futures.

So, sign up details are in the chat I think they are, and we hope to see you there so on that note, thank you very much and goodbye from me.

**Ya**: Thank you.

**Artem**: Thank you.

**Ya**: Thank you bye.