Interview with Dr Therese Kenna

RA: I'm really pleased today to be talking to Dr. Therese Kenna, who's a Geographer from University College Cork. And Therese, I was really pleased to read your article on ‘Cities of Neurodiversity’, and apart from anything else, that's just a great title. So I wondered if I could start by asking you how you got interested in this area, cities and neurodiversity?

TK: Yeah, absolutely. Well, thanks, first, for inviting me on to speak with you today. It's nice to be able to talk about, the research and talk about the research areas in a little bit more detail, and a bit more conversationally as well.

I suppose there's a couple of reasons why I got interested in this and started to write about this in the first place. And one was this, I'm curious about cities, myself, just generally as a geographer, and urban and social geography in particular. And one of the things I started to notice was the emergence of these autism-friendly city initiatives, which are now quite commonplace in a lot of cities, whether they're part through the UK, like, where you are, Ireland here, whether they're through parts of North America, or Australia, or wherever, we're starting to see these initiatives, whether it's retail outlets, shopping centres, especially like autism, friendly hours, and all these kinds of initiatives were starting to emerge. We also have a program here in Ireland, where we've got autism-friendly cities and towns that have started to emerge as well, where whole new plans are being constructed to create, a number of different initiatives for towns to become more holistically, autism-friendly. So I was interested in that, and at the same time, I was starting to encounter more people who were speaking very openly about being neurodiverse. And their own experiences of neurodiversity, and, or their children's experiences of neurodiversity, particularly as related to the city. And they were talking a lot about, very every day, mundane, kind of activities of getting on public transport, or going shopping, or getting to school, or work or whatever. And a lot of the stories that I was hearing was very much stories of exclusion, and, and the kind of barriers or issues that were being faced. And so having sort of, started to hear a lot of these things. And so to see these initiatives, I said, Well, let's turn to the literature, and let's have a look at what's happening. And I teach a course here called cities of diversity. And it's more broadly about diversity in the city, gender, and religion and sexuality and such things. But so I said, this could be a nice thing to bring into, the module that I was teaching. But when I started to engage with the literature as well, then I was struck by how little was being said, and how, not that nothing is being said about cities, and neurodiversity, but relatively little had been saved in comparison to other axes of difference. And in comparison to maybe, thinking about maybe sort of disability in the city more broadly, areas of disability that have had a lot of attention. This, this was an area that just sort of seems to not have as much kind of focus or as much attention in the research. So that's when I said, Okay, let's get into this kind of more detail, and see what directions we could be pursuing in relation to neurodiversity and the city.

So I identified a few gaps, I suppose, one of those is that there is an emerging, emerging body of work around autism in the built environment, I suppose, would be the way to kind of refer to that, primarily, it's coming from the urban professions like architecture, and urban design. And a lot of that is thinking about how we conceive of individual buildings or spaces, and how we design those with neurodiversity in mind, but particularly, they are thinking about autism, and how we design those buildings or those spaces with autism in mind. And a lot of this is inspired by the work of someone like Magda Mostafa, who is an architect who has created a series of design guidelines called aspects which are, around creating, basically autism-friendly spaces, and particularly design guidelines for those spaces. And they have and those criteria have informed a lot of recent kind of redevelopment activities, whether they're in schools, or here in my own university, we've created a calm zone, as part of an autism-friendly university initiative, which has been designed along those lines. So as I say, there was this emerging body of work within kind of architecture, and specifically, it was related to autism and the built environment. And there wasn't as much being said then about the wider urban environment, and so the wider kind of experiences of the city beyond some of those individual buildings and spaces. I think my reading of it was also that the emphasis was on autism,mand autism almost exclusively within that set of literature and not maybe a wider thinking about neurodiversity, you know.

And then also, again, I think that there is a strong emphasis on sensory sensitivities as the kind of main, perhaps the main issue that needed to be addressed by some of the kind of urban professions. And not maybe again, maybe a broader thinking about what neurological differences might mean in terms of terms of experiences of the city. So there was, so there's a bit of stuff kind of going on in that field, but there was a few gaps there, I suppose in that field. And so for me, it was about thinking about conceptualising neurodiversity, in broader terms, and thinking about neurodiversity as more than autism. Because for some people who are neurodiverse, they are not autistic, they may have been diagnosed with just ADHD or sensory processing or something else they might be diagnosed with. So as well, maybe thinking about, as I say, conceptualising, or thinking about neurodiversity more broadly, might be helpful. But then also thinking about neurodiversity as more than just a sensory sensitivity. And then, of course, thinking about neuro-diverse experiences in the wider urban environments, and that is things like, public transport spaces, public spaces of the city, and a whole range of spaces, and also the way in which those spaces are not standalone, but are interconnected, thinking about mobility through the city and things like that. So, so for me, these were some of the kinds of gaps that started to emerge, and I'm hoping that some of the research will start to speak to and at least begin a conversation on would be the idea, I think.

RA: Brilliant. Thank you. I mean, that sounds like really, really important research gaps to me. And I wonder if this would be a good place for you just to say a little bit more about how you're defining neurodiversity, and potentially how it relates to the social model of disability?

TK: Yeah, definitely. So I think that neurodiversity, I suppose is a very broad term. And it's become very popular, I think, at the moment, through podcasts, and with the seminar series and things that are being organised and things. So I think it's becoming very popular at the moment as a term, I think, at a very kind of simple way that neurodiversity is seen, as just basically differences in how our brains work or our brains function.

And that would be held to be understood, but it is used more broadly, like within the literature. So someone like Judy Singer would have defined neurodiversity, as encapsulating or attempting to capture a whole range of those neurological differences based on some of the kind of more official diagnosis around autism, ADHD, sensory processing disorder, OCD, so obsessive compulsive disorder, Tourette's, dyslexia, dyspraxia, so it's supposed to be this all-encompassing term that brings together a range of differences in how the brain might work.

One of the problems perhaps with, with some of these umbrella terms, is that while they are used in a way to try and capture diversity, and include as much, difference in diversity as possible, is that they can work unintentionally, perhaps, to silence other aspects of or some aspects of, say neurodiversity that may not be as dominant as others in public discourse, or even in healthcare settings, or whatever the story might be. And I think that might be partly why we have seen a strong emphasis on autism, within a lot of the literature and discussions on neurodiversity. And then we did a lot of the research on neurodiversity, as well. And so I think that, as I say, these terms can be very helpful. But sometimes when they're very broad, they can also silence or we can forget about some of the other aspects. So I suppose for me, that's also part of why we might think about conceptualising neurodiversity, in those broader terms.

So I suppose for me, and for geographers, sort of generally, the social model of disability has been really helpful, I suppose, in thinking about how we consider the kind of exclusionary effects of spatial design, in cities and of social attitudes, and how that creates a whole series of environments where a number of groups don't feel they belong, so I think that's been helpful and so, it would be similar in this sense that in research on neurodiversity in the city that we would need to attend to the production of urban space or the way we produce urban spaces through more neurotypical frames and how people who are neurodiverse have probably not been consulted as part of plans and for creating, for the production of spaces or the for the creation of cities, and probably aren't represented in planning, decision making or urban policy decision making, circles or processes effectively enough at this stage.

But there have been, I suppose in relation to the social model of disability, there have been a number of critiques of that, over the last number of years. And so, in geography, I suppose one of the main critiques of that would be that sometimes it presents space as perhaps maybe far too static in a static sense that, a space is either exclusionary or inclusionary. And not, not seeing a kind of grey area, so it's sort of sort of almost seen as kind of static as either black or white, and maybe not appreciating the possibility that it could be both, inclusionary, or an exclusionary space. And that there may be these kinds of grey areas or this fluidity, to how a space might be experienced. And so within geography, we've seen the emergence of what's kind of called a relational geography of disability. And there's a paper by Ed Hall and Rob Wilson, who have written specifically about this, and it's quite good and thinking through the way in which we still we still pay attention to the way in which spaces are produced to exclude certain groups. But we recognise that due to the say, diverse embodiment of say neurological diversity, and that is that people who are neurodiverse will experience neurodiversity in different ways, that we recognise that they too, then would experience spaces of the city in different ways. And that what might be an exclusionary space for one person may not be an exclusionary space for another, so while someone may find comfort in a cafe that is relatively dark in a quiet corner, others may like to sit in a cafe that's bright, and find exclusion in a brighter space, so I suppose it's about recognising that while we have these kinds of differences in how neurodiversity might be experienced, that also then has impacts on experiences of the city and of urban spaces. So I think, the kind of social model of disability has been extended a bit in some of the kind of newer thinking, certainly within geography and across some of the social sciences, to think about spaces as perhaps not being that kind of black and white inclusionary or exclusionary, but perhaps being both, and that that depends on, kind of the, the experiences of the individual and a whole range of others that may be present in those spaces at that time as well, if that clarifies.

RA: Yeah, yeah, very much so, and particularly, as well, thinking about intersectionality, and different axes of marginalisation as well. And we'll return to that later in the in the conversation. But I was just wanting to talk a little bit more about, specifically, your recent piece in *Area*. And just to talk a little bit about more specifically, how different areas, different aspects of neurodivergent might affect how a person experiences a city. So potentially, this might be differences in social communication, executive functioning, or sensory sensitivity. So, specifically, sort of how some of those things might affect one's experience of the city?

TK: Yeah, I think I think with, with sort of making this argument, I was thinking a bit about how people who are neurodiverse experience those differences differently, and it’s not a particularly profound statement, that there are differences to neurological difference. But that we should push beyond, as I was saying earlier, just thinking about the sensory sensitivities that end and the way those impacts while they are very important, in terms of somebody's experience, they aren't the only experience they are the only aspect or angle of the experiences of neurological diversity within the city, I think, so for many, as I said earlier like neurodiversity just refers or at a basic level can be about differences in how our brain responds to and maybe manages everyday life, and how and how we function in everyday life, or how the brain manages those functions. And it can be things like, meeting our deadlines for work, or getting to school and college or work or encountering others, or accessing public transport or, whatever it might be, and these can be for some people, and particularly for those who are neurodiverse, some of those aspects of everyday life, and everyday experiences through the city can be very demanding, can be exhausting, or could be very difficult, or all of those things, you know. So, I think it's important that we do recognise that there is that kind of complexity to those experiences, and that it isn't just those kinds of just the sensory kind of aspects. So some people say, in my research, they've been talking a little bit about social communication, right, and what that might mean, differences in social communication and what that might mean in terms of their everyday experiences of the cityscape, and some people will often talk about how they perceive social cues differently, and differently to others and how this impacts on things like conversations, or encounters with others. And that can lead to this understanding, like, so someone might be considered rude. If they didn't respond appropriately, or if they didn't make eye contact at the right moment, or at the right time, or whatever it might be.

And that's not at all their intention, of course, but this can be the way that these differences can be perceived. And so some report then, they will avoid social communication with others as a result of those differences. And that's not what we want, ideally, in a city that you would avoid those kinds of encounters. And so some talk about the use of headphones to sort of signal please don't speak to me, or I don't want to engage in kind of conversation, or to maybe avoid those kinds of conversations. Others talk about the use of things like self-service checkouts, again, to maybe, to maybe kind of avoid, kind of social encounters and social interactions. And, others report or someone was reporting to me as part of the research that they plan their conversations, and have a script in their mind about the way their kind of conversations will go when they're engaging with other people, like at a supermarket, so if they're going to the grocery store, and wherever it might be Tesco or wherever, and they, buy a few things, and they have a script in mind of exactly how the conversation will go. So someone will say, how are you today, and, they might comment on the weather, and, or, whatever the story might be, the sort of standard plan will be in place to kind of manage the interaction.

And someone was telling me that, then they get thrown by, change to that sort of script that they had prepared. So the latest thing was that they've introduced things like apps, do you have the Value Club Card, or do you have an app on your phone, for the discounts or, or whatever, and so, then the entire exchange was kind of thrown, as a result of, of that changing kind of conversation. So, there are kind of all these, these sort of differences, I suppose, in social communication play out in different kinds of ways, but they can have these impacts on, on how people feel, as I say, included or maybe excluded in different kind of everyday contexts, like in supermarkets or, or, or other areas, like on public transport, or something like that.

And then in relation to say, the sensitivities, sensory sensitivities, I think what's important to say about this is that, for people who are neurodiverse, this can be by both hypo- and hyper-sensitivities. But for some people, they have heightened sensitivities, and others will not, will, will not have, perhaps, have a reaction at all. And I think that is missing, actually, in a lot of the conversations about sensory sensitivities, it's often this kind of discussion about the heightened sensitivities, as opposed to the hypo aspects, which might be, a kind of less of a reaction, perhaps, to those. So thinking about like, for some people, some people talk about hot and cold, like, say, at the moment, that temperatures are quite cold, there's a lot of heating on in buildings. So you might walk into a building, and you might be covered from head to toe, and your scarves and coats and all kinds of things. And some people will report not recognising the heat level and not recognise it and then that can have an impact on their experiences. And then what happens within those particular buildings or spaces, as a result of maybe having not recognised that, that, that perhaps others might, I might just take coats off if I was getting very hot in here. And, and, and then we'd be able to navigate buildings and continue with our shops over Christmas at the moment or whatever it might be, you know, whereas others, do talk about kind of heightened sensitivities and noise is something that comes up a lot like sensitivity to noise.

And I think, again, there's some misunderstanding, around this. And I think while there can be a sensitivity to, sounds like loud noises, for example, I think it's more around my reading of it. It's not just loud noises, but it's the complexity of noises, that can actually create some of the experiences of exclusion within urban spaces or city spaces in particular. So it's not just whether or not there's loud music, say, for example, in a venue, it's about whether, it's about the, as I say, the combination of noises, or the complexity of noises, so like, maybe shoes, walking on the floor, as well as voices and conversations that could be going on, as well as cutlery clanging, in a restaurant or a cafe or something like that, as well as the playing of music. And so I think often, it's those kind of complexities of sounds, and complexities of noises, that can be what can become overwhelming, and can create those spaces of exclusion. So people who are neurotypical, as it might be called, can sometimes filter out some of those sort of sounds or the brain can filter out so you can focus on a conversation, whereas those who are neurodiverse can't necessarily always filter out some of those sounds. And so then you end up with these kinds of complex sounds and complex noise within a particular location. And that is what kind of creates those, those exclusions.

And then in terms of like, executive functioning, it's really as we were saying about kind of variability to maybe manage tasks and maybe complete tasks and stay on task and those things and things like that. So people in my study who have ADHD, for example, report the difficulties they experience of being in the city and staying on task and have not been distracted by the city. And it's the city becomes very distracting for them, so they have to do things like plan a route through the city and create a very strict list of tasks or what they need to do, so that they don't get distracted. And they actually complete the list of tasks. Because there is so much in the city that can create distraction, whether it's at the moment, I mean, you think about, the time of year that we are, there's, charities on the street, asking for money, there's carols, maybe there's Christmas, who knows what's going on, there's all kinds of, obviously, there are more people because of, shopping and retail, this kind of stuff. So there's a lot of stuff going on. So there's a lot of things that can distract, as can, other people are just interested in busking on the street, or whatever's happening, friends you might run into, and things like that, that all of that can create those exclusions, so for some people, they kind of create, as I say, these kinds of planning of routes or, or checklists to make sure that that things are done, and, and they don't, as we say, get distracted. So, but I think that, the point is, is that, it's important that we look at the kind of the range of difference, of, in the way the brain is working, what that means in terms of people's experiences, and that it isn't just about those sensory sensitivities. That those sensory sensitivities are very important, but are also very complex, and not kind of one dimensional, but that there are other aspects of the neurological differences that can create exclusion in the city as well, such as social communication, or, kind of other aspects of executive functioning.

RA: Great, no, no, that was really, really evocative. I mean, I'm sitting in my office here, but I can kind of imagine walking through the city and having these kinds of encounters that you're just describing now. And it also is great, because it speaks to the recent research that you've been doing, and gives me a real sense of that. And that was with neurodivergent students in Cork, I believe. I wondered if you could say a little bit more about the sort of findings from that research?

TK: Yeah, so there's a lot, I suppose, kind of going on with that. So with that research, one of the things that it sort of started out really, as I said before, was a kind of scoping sort of studies that identified that there was a few gaps in the literature, and I wanted to be, I suppose, careful about kind of approaching this research. And so I wanted it to be very much a kind of scoping exercise where I would create, a kind of very open ended survey, where people would engage with, or basically, I wanted to hear people's voices and their own experiences rather than create some checkbox survey, where it's just do you feel this? Or do you feel that? But actually let people just describe and explain their own experiences of the city until it the voice has come to the fore, because there's also a gap in the literature that I really should have said earlier is that there isn't enough voices if those were neurodiverse in that literature, either, and so there's a whole other sort of conversation that can go on about methods. But, this was really about just trying to begin this begin the conversation, as I said, Before, I begin to document some of the experiences of those who are neurodiverse in the city. And so there's a few things that that did come out of that, as I said, it was kind of an open survey. But the one thing that came out of that, I think was this idea that I said before, which was around the diversity of neurodiversity, and this kind of need to kind of conceptualise neurodiversity more broadly. So for me, one of the things that was most interesting was what we would refer to as the multiplicity of neurodiversity. And so of the people involved in the study, 50% of them had three or more neurodivergent diagnoses, and I think that that's really telling, because like I said. Before, there has been this emphasis on autism. And that's rightly so I'm not particularly, I don't critique that necessarily. But what I'm just suggesting is that their view that there's a lot perhaps,more we could, a broader kind of conceptualization, as I say.

And autism was the most dominant diagnosis of people in the research. But at the same time, there were many people in the research, who were not diagnosed with autism. But they did have a number of as I say, three or more neurodivergent diagnoses, 50% of them, is quite significant, and it talks to this idea of intersectionality, which maybe we can talk about later again, and so it's almost a topic in and of itself, but it speaks that idea of intersectionality, where we recognise that these kinds of that a particular aspect of neurological difference doesn't necessarily sit in isolation from others, it was that many people kind of embody diverse neurological differences, and so, so I thought that was that was particularly interesting to see that to see those kinds of figures.

I suppose the other thing that was that was interesting is that then the research kind of revealed that there is this diverse embodiment of neurological differences, which leads to diverse experiences of the city, so this idea that no two people with, who are neurodiverse are the same. I know two people who are, the quote goes from Ian Hacking that, if you've met one autistic person, you've met one autistic person, that no two people are the same. And, and so, I think, part of the research team does have to sort of recognise that is that there is such a diversity in the responses to how people experience the city, it does show that there is this that for everybody, they experienced neurological difference differently. And that, that then has a very big impact on differences in how the city and different urban spaces are experienced, which links nicely to some of that work I was talking about before, around relational sort of geographies of disability, because, it shows the way that when we do look at things like diverse embodiment, and we recognise that people do experience neurodiversity differently, and that no two people necessarily will experience it in the same way, as a result of maybe the intersections of different neurological diversities. And as a result of different diagnoses kind of intersecting, then those experiences of spaces, become, kind of different for different people. And some, as I say, as I said earlier, will experience inclusion and others would experience exclusion.

But I think what was interesting was that as part of the research is that people who are neurodiversity find and create spaces of inclusion within the city, which sort of speaks to this idea, again, if that, that kind of relational kind of experience, but it's sort of it's not this black and white idea, that space, the spaces of the city are just automatically all exclusionary, to people who are neurodiverse. And so there's some really interesting data that, looked at the way in which, as I said earlier, dark corners of a cafe can be a space where people feel very comfortable to sit and do work, or to read or to have lunch, or whatever others have would report things like brighter spaces, cafes, people talk about shops, with particular layouts, again, as a space that they could feel comfortable in, because maybe it was more predictable layout, or, or it had a particular look, we talked before about noise, like particular flooring, so people will talk about spaces of the city where there's carpet, as opposed to wooden floors, or tile floors, and how that makes a really big difference to their experience within that place. Because, because of the sound because of noise and because carpet reduces the shoes and the feet and the noises of that. So it's one less layer, takes away one kind of layer of the complexity of noise, perhaps, so there is all kinds of different reasons, like I say, like lighting might be one layout might be another flooring could be another, but it revealed the way in which very more mundane aspects of everyday life can make a very big difference, around flooring or lighting, can make can make a really big difference to someone in terms of how they may feel included in particular spaces.

But I think that as well, one of the things that came out of the research was the sort of strategies, I think that people who are neurodiverse are adopting to adapt to the exclusions that they experience in urban life. And these were like both social, spatial and temporal kind of adaptations that go on, but it creates a series of basically limitations, to engagements with the city, for them, for people who are reporting these kinds of experiences. So things like going to the shops, at, like planning to go to the shops at a particular time of day, and going to the city at a particular time of day, usually early in the morning, when there are less people around, and if it's less busy. So, again, this speaks to the kind of complexity of kind of inclusion and exclusion within the city. So, the creating these kind of temporal limits, I suppose, on spatial and temporal limits, are these time-space limitations, as we would call it, so, you're actively engaged in the city, but within limited timeframes, because you're adopting these strategies, to engage with the with the city, which is otherwise an exclusionary space, which are adopting these strategies to, to, facilitate around inclusion, I suppose, but that those strategies, speak to the limitations that exist for people who are neurodiverse as a result of the way the city is planned and designed and constructed without them in mind, I suppose.

29:51And then I think there was, a range of data that will was revealing about the kind of exclusions experienced in public spaces in particular, like overcrowding being a particular issue for people lack of predictability in many of the public spaces of cities, public transport, in particular, the buses was a key site of exclusion. And I think that that sort of spoke to the complex combination of factors that create a site of exclusion around public transport. Now, we know public transport is a site of exclusion for many, many minority groups, but we particularly, and particularly those that have a disability, we've known that through previous research, but I think what was revealing about this was the complexity again, it's like the complexity of noise. it was the complexity of the interactions and experiences with public transport, that made it a site of quite intense exclusion. So it's the business of bus stations, and dealing with bus stations and buying tickets and, and figuring out where you have to go where your bus is going to be, is it going to be at stand one or two, or ten, or nine, or whatever. And, it's the buying of tickets, as I said, it's the interacting with bus drivers and other passengers on the bus, it's the buses running late or on time, or over capacity or knowing when to get off for the bus route changes, or, the sheer complexity of the entire experience. Again, shows the experiences that people who are neurodiverse have in relation to the city. Likewise, with noise, like I was saying before, this kind of complex combination of a whole series of factors is what kind of led to our intensified the experiences of exclusion, that, that people who are neurodiverse reporting in relation to, in relation to the city.

Yeah, and then I think that then the only other thing I will say, then you can move on to something else, I don't know whether it was not so much surprising, but it's sobering, was the kind of mental and physical health implications of the exclusions that people were experiencing. And, like, people were reporting having panic attacks from, using buses, and, and the kind of complexity of having to use, the buses and, and maybe the uncertainty of using the buses or a particular exchange that might have happened on a bus or the fact that the bus was overcrowded. And people would talk very much about having those very physical, responses, bodily responses to those the kinds of exclusions that are being experienced in public transport. And so I think that particularly is worrying, I would think, other people report just being physically drained from the efforts to have to keep, the efforts required to continue to fit into spaces that are designed by and for others, the efforts created to make a plan through the city and to constantly be trying to keep yourself on task or to interact and engage with other people, those differences in social communication. So others report those kinds of, as I say, those kind of mental and physical health implications, and which sort of speaks to why, this kind of research and continuing research in this area would be so pressing, if there are these very kind of immediate and very real health implications that, we've got agendas for improving health and well-being in our cities. And this would seem to be a key area that, we would need to explore things, you know.

RA: Yeah, no, absolutely. And it does give a really good sense of how rich the data is that you got from this, from the open-ended survey. I wondered if I think you mentioned in, in the article that, doing walking, go along interviews would be a good way of getting additional information from neurodivergent people, indeed, if you just wanted to say a little bit about why you thought that and what that method could add to what you've already done.

TK: Yeah, I think that, there's a lot of different ways in which, this research could, could be approached. But it seems to me that what would be particularly helpful about, you know, a walking interview would be that it's probably because it's, it's more participatory, for starters, I think it's actually, that you get a sense of the experiences in situ, and as they're actually occurring, as opposed to people recalling past events, or recalling those events that, that I'm like they have done for me, which is basically recalling their experiences, which is still very powerful and still very rich, just as you say, and can be still very meaningful. But there is something very different about being present in the moment of those experiences, and then documenting those, as opposed to removing people from the places are the experiences of environments that we seek to understand, so being in those environments at that moment.

I think these kinds of approaches to research are more, participatory, as I said, and it's sometimes it can be done more on their own terms, people's own terms, they can determine the route, through the city, for example, if you're walking along a particular city, it takes away I think also some of the formality of face-to-face conversations, bearing in mind the possible differences in social communication that we've sort of mentioned. And that, it could be very helpful to have a more maybe relaxed, kind of perhaps, kind of environment or one where you don't have to solely rely on verbal conversation either. And so I think that when you're in situ, and you're doing these kinds of go-along interviews, or walk-along interviews, or some people refer to it sometimes as mobile observation, and, you can also experience I think, a range of encounters that might take place, and they don't all have to be verbal, like beyond verbal conversation, it could be things like facial expressions, whether it's of the participant themselves that's involved, or if it's other people that you might encounter, as part of that these things can actually be very revealing and can be very important parts. So, what is not said, can often be as important as what is said in some of these moments, so that would be I think, something that would be, kind of a strength of such an approach. And this is where, again, different forms of expression can become accommodated. So, if there are people that might find it difficult communicating in, a formal interview environment, or even recalling the experiences in a survey, for example, that this might be a way that might be able to be more kind of inclusive, I suppose.

One of the things that I've been a bit troubled about with that, though, I think, is more a question of ethics, actually, around the use of these particular interviews, and I don't think I have the answers yet, full answers on this. But something I'm kind of working through is that in relation to, in the research to date that I've done, as I just said, earlier, people have spoken a lot about the mental and physical health implications of the exclusions that they experience in the city on a day-to-day basis. So doing the research in situ might put, probably would put many people in a situation that they find deeply uncomfortable, and this could even, create for someone, a meltdown, or a breakdown or a panic attack of thoughts, and so I think that the ethical implications, really need to be thought through in how that's done to ensure that, harm is minimised, that we don't create, we don't add to, you know, health issues, or we, we don't kind of create harm in those kinds of in those kinds of environments. So, I still think that there's a bit to work out on that. But I still think that the benefits would, I think the benefits of such a such an approach, as I say, would possibly be, more true to experience, but it is just about balancing, balancing some of those kind of ethical questions, I think, for the research of this nature.

RA: Sure, and I guess, sort of different strategies get slightly different aspects of the experience because I was just thinking, as you're saying that go-along interviews are, I think, a really important method, but thinking about myself, I would experience the city very differently with someone than I would on my own. So perhaps there's also in-betweens of getting people to do a specific route on their own and then record or recall that specific route that would get something in between, and that would have strengths and limitations as well, I guess.

TK: Yeah. And actually, there are a few things on on, say, this particular clip on YouTube, where somebody walks down the street with a video, and they explain, and I don't know exactly how they've done it, but they just show what walking down the street, even for 100 metres looks like or how this is experienced by someone who is neurodiverse. And there's this, again, we talk about the noise and the sounds, and the lights and, cars and keys and, and everything that might kind of been going on. And so yeah, as you say, like, it can be very different if somebody, explains, or sort of works through their experiences or their realities on their own, and reports on those as opposed to somebody being present. Because people in my research, as well, have reported that actually, the presence of others makes the city a much more inclusive space. So the experiences would be very different for some people, that having others present means that they feel much more comfortable walking through the city, because, someone else might be assisting them navigating through public spaces or towards a bus station or something else, or if they're with their friends, they can focus just in on that conversation, or they know that they don't have to focus in on the conversation. In fact, if we just focus on walking to whatever location that they're going to, or whatever. So, a lot of people have reported the presence of others has a big impact. So likewise, as you say, the presence of others could have a big impact on how representative I suppose the actual experiences might be or how true those experiences might be in reality, so yeah, there would be different modes through which that might, as you say, work for some and not for others. Definitely, yeah.

RA: Wow, it's just, it's really fascinating to think about that diversity and the different impacts that could have. And I wouldn't actually that leads on nicely to something I was going to ask about other aspects of diversity and intersectionality. So I get a really good sense of the impacts of different neurodivergent conditions or different neurodiversities on people's experiences. But what kind of came out? In your study related to maybe gender, age, other types of disabilities? Sexuality? Did you get a sense of kind of differences related to that? How that interacted with neurodivergence?

TK: Yeah, I did, I suppose, to a point. So the sample itself was actually was diverse, to a point, I guess, it was quite diverse in terms of gender and sexuality. And this has been reported and other research on autism specifically that there is, a higher identification, perhaps, with diverse genders and diverse sexualities. So there is a higher maybe identification with non-binary gender identities, and a higher represent higher identification with diverse sexualities as well. And that was similar in my own study, in my own research, that there was a higher identification, we, as I say, diversity in terms of diverse sexualities, so it was much more diverse than maybe other, other sorts of surveys, or perhaps maybe even other groups, but, but it was less so in other senses, this particular survey, and probably speaks to the group that were surveyed. So this was young university students or college students. So the age profile was quite limited to the kind of 18 to 30-year-olds give or take, there was a few, outside of that, but predominantly, that was the kind of dominant age cohort, it was also mostly white Irish, in terms of the participants, so I could get a sense of maybe how gender, for example, might impact might intersect with neurodiversity, and how that might impact then experiences in particular ways. Or how people feel they can behave or react or respond in the city or in urban spaces, but perhaps not. So, in others, though, I imagine it is critical, it's a critical aspect of experience. And so, I think it is, for further research will be a critical aspect.

So there was one particular, there's a couple of things that stuck out in particular, but there was one where there was a young male participant was reporting on a particular experience of having been in the city meeting up with friends, one night, they were meeting up with friends, and they'd organised to meet at a particular pub at a particular time, then we're going to get off the bus and they knew, they have, they had it all planned, shall we say, where they were going, but of course, it was a, it was a busy night, I don't know, it's Halloween or something was something was kind of going on, and our sporting event or something was happening, there was a lot of people in the street. And people were, out and, as they are jovial, singing, and all kinds of things going on and, and he reports that, people put their arm around, around him as he was walking down through it, and they were singing, and they were grabbing him and sort of singing in his ear, and all of this kind of stuff was happening. And, and he talks about how, that kind of made him feel very uncomfortable, understandably, and, and he said, I wanted to break down, but I couldn't break down in public, and it talks about going off into a quiet alleyway, and, and, and then eventually breaking down before meeting up with his friends, you know.

And I was really struck by this idea of, I couldn't break down in public. And secondly, why can't you break down in public? And, you wonder at that moment like, is this does this kind of intersect with gender and does this intersect with kind of masculine ideas or masculine norms around or societal norms of what, of what masculinity is and of what is acceptable for a young man to do and in terms of show of emotion or particular behaviour in public or a particular ways of being, and so, you would imagine that, that there is something there playing out that had an impact on to why he felt he couldn't do that, in that moment in the public space as it was unfolding, and then you have to go to a quiet place away from view for that to happen. So, I do think that that there are these kinds of subtle, intersection subtle or maybe not so, subtle intersections of, of different aspects of identity unfolding. And that is, creating very specific and unique experiences of the city and, for different groups. And so, there are other, other examples in particular of say women would report on particular experiences of anxiety related to public transport use as well. So those kinds of experiences were particularly gendered as well. So there was clear elements of kind of intersections between, as I say, gender was, was one of the stronger areas where it became more prevalent, or the, the, the intersections were more or more prevalent, as I say, but I think if you had a larger sample or a different city or a different location, you would perhaps see different intersections, it would be it would be of critical importance, I would imagine, to see the intersections with other things like race, and religion and other aspects of diversity and see the intersections with neurodiversity. And how that impacts on experiences. Definitely.

RA: Yes, I mean, it occurred to me that, for instance, in terms of feeling welcome in certain kinds of semi-public spaces would be affected by race and ethnicity and age, and a lot of factors will have a big impact on that.

TK: Oh, absolutely. And a lot of people in the study, as well have reported things, like I said earlier about how people there's a lot of a lot of people report these headphones, throughout the city, as part of like noise cancelling headphones, and helps as this is used for a lot of different strategies. It's not just noise, but it helps with the differences in social communication, and various different things people report, being a particular age, that is helpful. But some people also report that because they're college students, they're wearing backpacks, that the impacts, that this actually gets a lot of unwarranted attention from security staff in retail outlets, and so they will often report things like, feeling like they're being followed or being watched unnecessarily by such staff in some of these retail spaces. Again, they're not, there's no reason for that, there's no need for that. But I can imagine that those feelings would be compounded if you were, there was a particular other axiom of identity at play here as well, like in relation to say, race, or other aspects of say, religion or diversity in there, like you think about, things like racial profiling, and, and some of the issues that, that are experienced there. It’s in the, it's in news reports, every other day of someone being misidentified, or wrongly identified, because they look up, a particular way. And, police will behave in particular ways or, discriminating in particular ways. So, I suspect that those experiences are suddenly compounded from, according to different aspects of identity.

RA: Sure, definitely, though, yes. And I was going to actually ask another sort of question about the specific context of the research, which was around Cork itself. So, I have visited very long time ago, I don't remember it that well, but I'm thinking about it in terms of its size, layout, and, some of the kinds of mobility patterns or public space or green space, and how that kind of might affect people's experiences? I'm sitting here in London, with 8 million people, and it's quite a potentially quite a different experience again, for neurodivergent people.

TK: Yeah, definitely. Like, I think, I think it plays a role. I think the city itself plays a role. Absolutely, but I think that different cities will exclude or accommodate in different ways. And so I don't know that there's one, that we can particularly focus on one aspect per se, like city size, population size, necessarily. I think that they are going to, as I say, like, exclude or accommodate indoor accommodation, in different sorts of ways. So, someone in my research, I was talking to you about this question, actually, like I said, so what, what, for you makes more of an ideal city? Or what makes the city much more inclusive? And they were interesting. Interestingly, they started to talk about Singapore. And they had recently been on a trip to Singapore. And they talk about how, and they're from Cork, and they are autistic. And they spoke about how they really enjoyed Singapore. And of course, Singapore is not dissimilar to London and has aspects which are, a large city, and it's busy and can be congested, and have all those kinds of components, but what they identified as important for them was the diversity of spaces. And so it wasn't that you're in this homogenous city, where it was all large buildings, or all permanently congested, but they had an ability to move through the city and through a range of different spaces. So, like, they kind of refer to it as sort of seeking refuge and you're able to kind of move between spaces. And so, if you were in a space that you perhaps didn't find quite so comfortable, you weren't too far away from a space that you might find comfortable, or you might find a greater degree of inclusion. And, for those that know, Singapore, there are elements of Singapore that are you've got areas where there's street markets and there's a lot of intense kind of activity and, and a lot of people around and then you've got areas where there's a lot more business activity, you've got areas where they've got the marina and Gardens by the Bay. And so you can move between certain areas of the city. And so they were talking about those diverse spaces. And I think in some ways, Cork offers that, in many cities actually, offers that those kinds of diverse spaces. So, for Cork City in particular, we have two tributaries of the river that flow, around the kind of core city centre. And so there's areas there have boardwalks and walkways along the river that you can seek, again, a diversity of spaces that there are some green spaces in the city, as well. Not a lot, if it could be more, and as with everything, maybe it could be more, but that there are these kinds of, diversity and diversity of spaces, I think. It could be something that could be critical elements here, and that we resist those kinds of moves to create more homogenous spaces, and that I think, we think very carefully maybe abot the materials that we use, as well like thinking about, architecture and design, and that we think about the very fabric of the city and the glass or the tiling, or the flooring, and then all of those components, and the colour schemes and various different things, could actually be very helpful to think about, you know. But people did refer to that, thinking about city size, though, I mean, I wouldn't write it off as an important component, I mean, somebody did say, to me, as part of the research that they thought that Cork was very ADHD friendly, as they call it, was because of its size. So, for them, that one of the things, they were always forgetting things, they were college students, and they'd always leave something at home, whether it's their lunch was left at home, or books were left at home or whatever. And because of its size, they could easily go home and collect what they needed, as opposed to it being this big journey, or this big commute across, multiple transport systems or whatever, they can literally just walk home and come back, and, and we are kind of set up for that. Now, that wouldn't be everybody's experience, I suppose the college students would generally live close to the campus, so they would have that kind of accessibility. But again, we are a small city, so it is easier if you do if you do, forget something that you may be able to retrieve that or to go back, even if you left your phone or your jacket in a shop that, it's you can probably easily get back to some of those places. But I suppose other things, the, there's other things to think about as well, in terms of things like, say public transport has been a topic that's come up a lot as part of this research and, and, for us in Cork, say like, there is, there is some rail services, but buses are the main form of public transport, for most people throughout the city.

So, could a rail network improve experiences of the city? Would a metro system change things, which London has? for example, possibly, is it more predictable? And the buses? Would that be helpful if there are less delays? I don't know. I know we all have complaints about, the public transport systems. And then they're all imperfect, but maybe again, it comes back to that question that or that thing about diversity, and having those diverse options for transportation, though it is about, creating, more walkability, if that suits people, and enabling that, or cycleways, if people would prefer that, or bike lanes, whatever, are enabling those different modes of transport, not just that sole reliance on buses, is what created those means of exclusion for many people as well, so I think that that could be something to kind of to be thinking about, I think more is that diversity, and that there are options. Because like I said, before, some people find spaces deeply exclusionary, while others will be able to find inclusion in those spaces. So, by having the diversity of options, maybe around transportation, or better options around transportation, it may be, it may be part of what helps to create a greater kind of inclusion, as well as having the voices of those who are neurodiverse included in those, transportation systems; and in the planning of such transportation systems. It could be that we have diversity of spaces and throughout the city and our gardens and parks and buildings and infrastructure, and as well as the public transport systems. it might be that diversity that, that actually can help to make the cities that much more inclusive, perhaps.

RA: Fantastic, I mean, I think that's partly answered the question that I was about to ask, but I'll ask it anyway. So you might want to say a little bit more before we start wrapping up. So I was in looking at the draft paper on your research, you were talking about the limits of autism, or indeed autism-friendly cities. And I suppose maybe kind of contrasting that to making cities that were inclusive for a diverse neurodivergent population. And I guess you were just talking about that then, but I wondered if you wanted to say a little bit more about creating cities that welcome and celebrate all kinds of neurodiversity?

TK: Yeah, definitely. I mean, I think that, when I, when I make those points, what I'm conscious of is that like, we are seeing these kinds of autism-friendly initiatives, or sometimes these autism hours, whether it's in the retail spaces or libraries, or wherever, wherever it is. And I think generally speaking, these things should all be encouraged, any anything that helps to recognise diversity, and to attempt to accommodate and create more inclusive spaces, should be welcomed. But at the same time, while they can be very well-intentioned, I think that they can lead to a degree of exclusion and segregation and can possibly add to misunderstanding. And we've seen this elsewhere, in work on say, other aspects of disability in the city on things like wheelchair accessibility, and the creation of different spaces, and how, initially, some of that, some of that research looks at the way in which, say wheelchair accessible toilets were put in the back of a building in, relatively inaccessible places actually, and so could lead to people feeling excluded or singled out, or attention being drawn to difference and diversity. So that can be problematic in their own ways.

But I think what's, I think the other thing about some of these initiatives in my reading of some of these initiatives is that they focus in on the sensory aspects, like they're focused on autism only for starters, I think, which is important, as I say, in and of itself, but it doesn't necessarily cater to neurodiversity more broadly. But also, they tend to focus on sensory aspects, and certainly, that's our experience here, it would be about supermarkets turning the lighting down, and reducing the noise and, and doing a few and having kind of initiatives along those lines, which again, can create a misunderstanding, or a limited understanding of what your diversity is, and what neurodiverse experiences might be, as well in some of those spaces. But I think, what would be an ideal kind of reality or outcome really is, it sort of relates to more around shifting societal norms, and ways of doing things, and appreciating that people do things differently, and that, and that, that's okay.

And then we make space for people to do things differently, you know. And that we give, we have spaces where people can do things differently all at the same time. and I think about libraries, and I was in the library on the weekend, and, libraries, that these spaces that are have these kinds of codes of conduct almost that have long existed over libraries, that you shouldn't dare talk in a library, don't dare speak, don't make any noise in a library, don't eat, don't open packets, these kinds of norms that exist, within a library. And actually, then I was going to the library on the weekend, and I have two small children. And our library has just been really redone. And, and it's fabulous, the local library, and it's got an area for kids, with all kids with all these sensory toys, and of course, the kids are, they're doing all kinds of things, as are all these other children who were there, and the library is full of life, it is absolutely full of life, because it's created in a way it's been created in a way where there are different spaces for different groups to be part of, a public facility or, our social or community facility. And we have all these different ways of doing things. So of course, the kids don't want to sit still, and look at the books, they want to climb over on the books, and they want to talk really loudly, or they want to play hide and seek in the library or their whatever they want to do, and so, I think it's about creating these spaces, where, whoever we are, that we all that we have space, I suppose, for for everybody. And then we appreciate if they say people doing things differently, and then all of that people can do things differently within the same space, and then we shift some of those ways of thinking about that, how people do things. There's also a really nice book that has been written on, on some of these kinds of issues. And I think it could relate to issues of neurodiversity. There was a book written called ‘Everyday Equalities’. And it was published back in 2019. And it's published, it's written by Ruth Fincher and a number of colleagues, and it's written across a number of examples from Australia and Canada, and across North America and what they talk about is it's primarily looking at the experiences of multiculture, so diverse cultural groups kind of coming together and how you create the encounter between diverse cultural groups and, and things like that. There's a lot to that book, but they use this particular phrase that I think is a very nice phrase, and it's being together in difference as equals. And I think it's a really nice phrase that could potentially be brought into wider thinking about encounters with difference and encounters with diversity within the public spaces of our cities. And and if you think about that being together in difference, so that we are all different, and there are all different ways of doing things, and that we come together in difference, not trying to change somebody or get them to behave in a particular way, we come together, in difference as equals, and that that is kind of perhaps a point where we can start thinking about, how we might create the kind of the future cities and the public cities is that we create not only the diverse spaces of the cities, as we were saying before, so that people can find the spaces of inclusion and exclusion throughout, rather than creating homogenous cities or a particular kind of single way of being or doing things, we create spaces where we can appreciate people doing things differently, and, and enable people to do things differently, I think.

RA: Fantastic. That's a great motto for the, for the future city. And that's also a great point to, I guess, asked my last question, which was really about the, not just the future city, but the future research agenda? What are you hoping to do next? What kind of things do you think would progress this research agenda?

TK: Yeah, I mean, well, I think there's a lot to do, actually, and because as I said, at the start, this is really about kind of scoping, and starting to figure out what those what might be worth exploring or letting the participants help to inform that, in rather than me just reading literature and thinking about, about things, but actually getting people to begin to inform the next stages of the research, I do think, as we were talking before, about the kind of walking interviews, that that probably needs to be the next stage in terms of a methodological development is moving beyond the survey research, or even interview research, or some of the even more conventional methods of, of kind of social research to moving beyond to understanding experience, as I said before, like in situ, so I think that has to be developed as part of this.

I think, in particular, I have an interest in in the kind of questions of encounter, encountering the city, encounters with, with difference, and how that might be worked through. So I think there's a there's a question around encounter. How, neurodiversity is understood, more broadly, what awareness exists around neurodiversity, and how that impacts on people's experiences. Because that seems to be something that came up a lot, as part of this, as part of this sort of scoping research was how people perceived neurological differences, how they were told they should or shouldn't behave, and these kind, all these kinds of aspects just seem to be so ingrained in a lot of the kind of responses and, and so I think that there's something there to, to work through around, those kinds of questions of encounter, encounter with others encounter with public spaces in the city, and work through some of these things around these kinds of, library spaces and autism friendly hours. And, and those kinds of questions, I think, need to kind of be worked through in in much more significant detail. I do think also, then that, my research was very limited, as I said before, in terms of the actual sample, this was young, college students. And so I really do think that we need to look at neurodiverse experiences across the life course, a lot of the research on autism, and the built environment is focused primarily on children and children's learning spaces. And this is very important, obviously, and there's critical spaces for young people and children in particular. But I think that, that kind of diverse age, life course and age spectrum needs to be brought into to a lot of the research. And certainly thinking about people, maybe in elderly groups and, and different sorts of different sorts of needs as well. And so that would be the other aspect is not only thinking about neurodiverse experiences across the life course, but for those with a range of support needs. So for the people in my study, there were people who would be considered to have lower support needs, and then there are people who are neurodiverse, that would have higher support needs. And so they may have very different, they will have, different experiences of the city. And they will also have carers and so the carers and the families will also, possibly need to be brought into to research when we're thinking about kind of neurodiverse experiences, because as I said, right at the start, I've heard a lot from parents who have children who are neurodiverse about the experiences that they've had. So, I think there's a whole there's a whole range of different cohorts and a whole range of different groups where we need to hear from as we begin these conversations, and we continue these conversations about neurodiverse experiences of the city.

RA: Brilliant. Well, yeah, that sounds really important and fascinating, and I will definitely be following it. Yeah, the next steps in your research and thank you so much for talking to me Therese.