Exploring babies' and young children's development and learning
From intersubjectivity to subjectivity

Narrator:
Dr. Suzanne Zeedyk is a senior lecturer in Psychology at the University of Dundee. Her main field of research is into the interwoven strands of parent-infant communication and interaction. Here she talks about her ideas and comments on her paper From intersubjectivity to subjectivity: The transformative roles of imitation and intimacy.

Suzanne:
In a very basic sense subjectivity is kind of a sense of self, and inter-subjectivity is how we try to bring two selves together, so can they engage or respond to each other or do they exist in some sort of parallel way, and given that humans are actually very inter-subjective creatures one of the questions is how do we develop that ability?

The reason that excites psychologists is the question of origins. Do you, given that lots of adults are inter-subjective, so if you smile I have an idea that you're happy, or if you frown I have an idea that something's not happy about you, and I know when your sentence is going to end and it's my turn, right. Is that something that sensitivity to other people, is that something that we learn? Or is it something that we're born with? If it isn't something that we're born with how do we actually acquire that sensitivity to other people? And studies of babies let you answer those questions of origin but then you have the question of what do I look for in a baby's behaviour to help me to know about their sensitivity to other people.

We've had a lot of discussion in developmental psychology about the shift from subjectivity to inter-subjectivity so one idea is that I come into the world as a kind of a self, as aware of myself, and how do I connect to you, so how do I become an inter-subjective being? Mead and Vygotsky would say actually that it's out of inter-subjectivity that our subjectivity comes, so it's almost two different developmental pathways – do I go from self to engagement, or do I go from engagement to self. One of the big criticisms that's been made of Vygotsky's work is he said that, he had an idea, but he didn't really say how that happened, and that's what I wanted to explore in this paper – is what would happen in this interaction between two people that would give rise to a sense of self in an individual.

One of the things that strikes me about two people interacting and about very early interactions between parents and children is how focused they can be, how intimate they can be, so we know that at three months old babies love engaging with other people and they're totally into it, not all the time, because they do it for a shortish amount of time, but they can be totally into it, they're transfixed by the other person, and in lots of studies of mother interaction mothers are transfixed by them, so those who are very close, very emotionally engaged, and interestingly in developmental psychology we often don't look at the emotions in that engagement, so one of the things we're good at is thinking about how babies think, and again a particular cap of development psychology says that what babies do is think about other people and what I'm really saying is babies feel with other people rather than think about other people, and it is that feeling with that inter-subjective experience out of which comes a sense of self, okay. And in the paper I talk about imitation. The exciting thing about imitation is a really close matching between self and other. I cannot help but notice if you are imitating me or doing something in correspondence with me, I get that you are doing something about me, so that relation between us is enhanced and sharpened, and so the intimacy is made all that tighter, and if we look at imitation across babies and across adults, across people with communicative impairments as soon as you start imitating it's like that, it like turns on this light bulb, so that's why I think that imitation really enhances this sense of intimacy of which I think subjectivity might be growing.

Narrator:

We asked Suzanne about the work of other psychologists, such as Professor Andy Meltzoff, who think that babies assume that other people are like themselves.

Suzanne:
Andy and other people like Tomasello and Lewis and a whole camp of developmental psychologists, are sort of saying that you come into the world with a sense of self some sort of sense of self, and you're interested in other people but how did we create this relationship? Whatever you say is that babies notice the similarity in movements and it helps them to think about other people so we do it by simulation, so at some level I'm going oh, when I suck my thumb, that helps me become calm, so when you suck your thumb you must also be calm because, because Andy is drawing on a very philosophical idea that what we think and feel is hidden inside our heads and I have to infer it, it isn't obvious, it's hidden and that's a very Cartesian idea that mind and body are a dichotomy that they're the split. There's other people like Trevarthen and Reddy and Mead who would take the view that actually mind is not quite so hidden, that it is present, that you can see it, and therefore I can feel with you, so, it is out of this emotional rather than thinking that engagement comes, but an important proviso is that I at least as a baby have to have an interest in what you are doing and there has to be some sort of sense of separation between you and me because babies take their turns, we know that they do from as neonates, so if you stick out your tongue I can stick my tongue back out at you, and then you can take a turn and I can take a turn, so babies have got that turn-taking rhythm, so it's probably more than you bring some sort of sense of subjectivity but also inter-subjectivity and happen to be feeling because here's the big question – if your mind is hidden then the process of me understanding that mind is mysterious, I need a bridge to get to you and that's what Meltzoff is trying to build is this active internodal matching that he talks about. What I'm saying is that actually if it's obvious I don't need to build a bridge, what you're thinking and feeling is apparent to me and I can work with that.

Narrator:
We asked her why interactions and imitation are important for social development.

Suzanne:
Does the interaction matter if you already come with subjectivity? Yes, because you've all that, that subjective sense of self has to be fleshed out, has to be enriched. I may have some sort of sense of who I am but I don't know all the things that that sense of self means, it doesn't have any, it doesn't have any qualities yet, right, so it is in interaction between us that I get a better sense o what the boundaries between you and me are, so let me try and give an example. What I'm trying to work out is the nature of relationship, where do I stand in relation to you? If I stick my tongue out do you stick your tongue back out, and we end up laughing, that's something we can share. Or if I stick my tongue out at you do you actually withdraw and I think oh, okay, that's uncomfortable. We start to work out what the boundaries between myself and yourself and our relation, where it lets us go, effectively we're building trust, and one of the reasons that's important is that I then take that sense of self, which I learned in relation to you, into my other relationships in future,

Narrator:
Suzanne outlined an important difference between her idea and those of Professor Andy Meltzoff.

Suzanne:
Andy Meltzoff is interested in the cognitive pathways and mine are the affectual pathways, but that's a really important distinction because if, if a mind is hidden and what I do is think about you, then this process of interaction, of inter-subjectivity, is mysterious, that's why I need a bridge, whereas if it is affectual and it is present in the body it's not mysterious, it makes sense why I would be able to so easily and quickly read the emotional expressions on your face. So the key thing is that it takes the mystery out of the process and it highlights something that developmental psychologists have just not really given a lot of attention to which is the emotional nature of engagement.

Narrator:

What does Suzanne think about the implication that infants' minds are more advanced than has previously been thought?

Suzanne:
I want to ask why are we so surprised by that, why do we not take that as read? We're not surprised when babies have ten fingers and toes, but we are somehow surprised that they are so socially sensitive. We are surprised by that because of our ideas about babies. The question is how do we convince sceptics, and therein lies the wondrousness of infancy research. All you've got to go on is a baby's behaviour. What will I look for in a baby's behaviour and in order to tell about inter-subjectivity, or subjectivity, or anything, right, the key thing for inter-subjective questions is what is the baby's responsiveness to other people? So it's not just how the baby responds on their own but how tuned in their behaviour is to somebody else, that's why the still face paradigm is so interesting. Babies, from the time they are neonates we now know, are sensitive to if you stop responding to them, their face goes still, and then when you start to respond to them again they wake back up. Well actually maybe they're anxious why you went away from me, why did you go, this is a bit scary, so still face is one. The imitation is one, so you stick your tongue out, the baby sticks their tongue back out at you. Neural research shows that not only do babies respond to what you do, if you stop after a while, say you've been having a lovely conversation, sticking up fingers, if you stop, after a little bit the baby will go hello, where did you go? So babies provoke as well – those are examples of the kind of phenomena that we can look at to try to understand about intersubjectivity. But the question is always – is it enough? Will it convince other people? We are talking about how do we interpret behaviour and that's the challenge of infancy research.

We've often seen imitation as, up till now, as a way of thinking about other people, that, again that's what Andy Meltzoff would say, that when you do the same thing that I do, so I perform, so I go like this, you do, you do this, or I stick my tongue out, you perform an action – that that helps me to think about you because we're doing the same behaviours. What if imitation is actually about emotional engagement, and therefore it's not just about the linear sequence of actions, but it's about anything that's similar between us, so is imitation also when you adopt the same posture as me, which we've tended to call atunement in the literature, so that was supposed to be picking up the emotional aspect. What if we need to redefine what imitation is? And the reason that could be important is because by redefining it we better understand the questions we set out to answer. We might have missed the importance of imitation for promoting intimacy because we didn't think about it that way and therefore we didn't get the evidence that would help us to answer that question.

Narrator:
Finally, we asked Suzanne about the more general importance of imitation, particularly with individuals with disabilities?

Suzanne:
One of the things that this newly emerging area of research is showing, is that if you use imitation with people who have communicative impairments like children or adults with autism, learning disabilities, children who suffered severe neglect like, like orphans in Romania, dementia, so people who are having trouble communicating and engaging socially we now know that if you use imitation as an intervention it has what some people describe as almost magical effects, and within seconds, which sounds too soon but literally if you measure the time within seconds the people are traditionally disengaged move right back in, they become much more interested, they begin to look more, they begin to focus more, they begin to smile, they begin to do all the things that we see babies doing. So the first question is – is that true, does that really work? Well we need, we need more research on it but the answer to that is yes, it works, so the next question is why does it work, and it brings us back to all these questions about imitation, and about subjectivity, and inter-subjectivity. And the implications of that are huge. So if we take dementia as an example because I think that's really cutting edge, we tend to think that people with dementia have lost their social ability, their ability to engage socially, because they're not doing anything that we'd recognise as social, and that's hard, that's so hard for us, so if they're not nodding after I'm saying something, it's hard for me to engage with them, and if their face is blank it's like a still face. So carers in homes,

they're now filled in British society with people who have dementia, aren't getting any feedback and they're not giving engagement to people. So what you have are people who are more and more and more disengaged. Amazingly, if you used their body language and you could call it imitate, but actually maybe imitation is the wrong word, suddenly now we have to think about what do we mean by our terms, and in fact some people would say imitation is too harsh, that makes it sound it like you're mimicking them, you're mimicking their behaviour, you're not communicating with them, so maybe we need to call it something else, so that's an interesting pathway. If we use their bodily language as the way to communicate with them, they're back in like that, they're engaged, they're smiling, they're doing turn-taking, and they're almost joyful. Right, that says their inter-subjective capacities have not disappeared, we haven't been able to bring those out because of our response to them, but they're just below the surface, they're responding like that. So they have implications for the kind of interventions we use, the kind of drugs we administer, and the kinds of worlds we make people live in so perhaps their social capacities which are decreased are actually of our making rather than theirs. That's not just true for dementia, it's true for children with autism which we often see as not really wanting to engage – our work is showing that if you use their their bodily language as the way for engaging with them, they can do a lot more social things than we think they can. That then makes us say what is autism again, what questions have we got to ask, why should they be able to do this highly sophisticated thing when I didn't think autistic kids could do that? And that brings me back to why did we see it as so sophisticated, why are we so surprised? So the thing that's exciting about imitation, and communicative impairments is that they make us think again about the whole basis of human nature and about what is inter-subjectivity, and what is it again that those babies can do because we're using the things that we know about babies to now interact with adults, and it brings full circle this whole thing about subjectivity and inter-subjectivity, and raises a whole new sets of questions that I think we have only begun to think about.