Art and the brain, there's a lot that can be said about it. But I'm saying just two things I think these are the two most fundamental things that a neurobiologist can say about the arts. But normally what happens is they, they form a submission dominance hierarchy. But in the kind of play that all of us mammals do the prototype for play, which is rough and tumble play when one mammal chases the other one, you know, you know how the whole thing works, the dog sort of wags its tail and, and, and, and goes down on all fours like this and this invites the other dog to play. What's it all for by observing this surprising fact that although kids want to play and enjoy playing so much, if you actually empirically observe play episodes, a sufficient number of them, what you, what you see is that most play episodes end in

tears. Um As they grow up from the juvenile into the adolescent phase, so play becomes more competitive, becomes more clear that this is about establishing the pecking order, seeing who's top dog who's king of the castle, who's dirty Rascal. These are really fundamental, basic, essential things terribly important among these different instinctual emotional systems, like fear and anger and sexuality and so

on. One stands out for me as being the most relevant uh for art and that is an instinct to play.Um Another fundamental uh inference that we've drawn from observing play episodes is, is what we call the 60 40 rule. It serves this very important function uh uh of imagining of trying out of as if testing the limits, but ultimately, the rules uh are established and then it's within that framework that society can operate. mean, it's not life, it is about life, it represents life, it evokes life, it imagines life, it reflects on life. If you deprive a juvenile mammal of half an hour's play today, it'll make up that half an hour tomorrow. It guickly recognizes up, this is play or cats or rats, you know, we all do it and then what they do is the one chases the other, the one jumps on the other one's back, it turns it over tickles it and then it's, you take turns, do it the other way around. I'm not actually operating on you if I were to really, uh uh uh if it was, if it was to transform from play into reality, uh, then it would be uh bullying, it would be I'm imprisoning you. And I think that looking at these two things from a neuroscientific point of view enables us to see these two fundamental properties of what art is in a slightly different waylve said firstly, that art embodies value. There are different basic instinctual emotional systems which are tools for living, tools for surviving and reproducing. That's why evolution has selected it in. Um Another reason, uh another way of putting the fact that it's important is that it's terribly pleasurable. It's still fun for the submissive one as long as they get to be chasing and get to be on top, a sufficient amount of the time, roughly 40% of the time. Uh uh how much of this exuberant joy at being chasing and, and being on top and tickling and being the active one and so on. How much of this am I allowed to get away with? And as I'm saying, it's this transition into reality as opposed to play, which is, which is fundamentally what play is for. And this is how the social group is formed, how the social group is regulated and we humans as all mammals are social animals. People are often surprised to hear that there is an instinct to play mammals and this is not a uniquely human thing. It's a, it's an almost homeostatic uh need uh of, of, of young mammals. Usually it, it, it evokes one of the other basic instinctual emotional systems. That's the transition from play into one of the other instinctual systems. This is something fundamental about the role that the artist plays in society, in mammals. It ultimately also becomes about value in a competitive sense. Uh that's what is different about art as opposed to life. It's the not, it's the not realness about it. Now, where does all of this come .from?Mammals play