

System explained by Humberto Maturana

Triggering change in human social system; Escaping traps; Totalitarian system

Speaker 1, Humberto Maturana:

SPEAKER 1: Humberto, we're getting close to the time we have available for our conversation. I would like to invite you to perhaps reflect on where you are most excited by the uptake or the use of your understandings and distinctions that you like.

HUMBERTO MATURANA: Oh, my goodness, I have more exactly. I am in all. I am happily surprised but not in a naive manner. I think that-- I do not know here in England of course, but in Chile, two things have happened in relation to this. One in education. People in education are realizing that the central element in education is love. That the dynamics of the educational process must be social as love. It's not hierarchical, it's not positive, it's not instructive. It's a transformation in living together.

And for that information of living together to take place in a way that the children grow a self-respecting and socially conscious individuals, love must be the grounding emotion of the whole dynamic of education. I have been interested in this and taking this understanding to generate a practice with the teachers of recovering self-respect so that they can end in a dynamic of self-respect with the children spontaneously without telling them you have to respect the child. If you tell you have to respect the child, but I have to do no nobody knows. But in the moment in which to recover self-respect knows exactly what to do with a child without anybody telling him or her. This is an important thing that is happening. I mean, I'm surprised and delighted with this.

I am happy with what is happening either directly or indirectly in relation to my view of the nervous system because everything is coming to see the nervous system as it operates as a closed system. I'm happy to what we have been able to do in Santiago with respect to the design of some systems of operation as closed systems like a nervous system. I am also happy to discover that this understanding is being taken seriously for in Chile in the departments of psychology and in engineering with respect to the understanding of systems. Rahul, for example, has taken many things. You yourself said a moment ago that we have been using this thing and invite me. So this is a remarkable thing to me and which delights me

because it's precisely those areas where these things have a presence, which goes beyond the particularity of the biological phenomenon as such or of the nervous system as an operation as such but in the domain, which we human beings exist.

SPEAKER 1: You've outlined the things that excite you. Are the areas where you feel frustrated, where you feel that there are different groups or sectors who misinterpret or misrepresent your position?

HUMBERTO MATURANA: Yes, a little bit biologist. Biologists have become too reductionist in the present days. Biologists seem to have a great success by the discourse of genetic determination and all that. So this generates a blindness about the systemic character of biological phenomena and the systemic character of the biosphere. And so there appears an arrogance with respect to what one can do.

Because no doubt that we can do whatever we imagine-- look what I'm saying-- we can do whatever we imagine provided with respect we imagine this within the operational coherence is in the domain in which we are imagining it. So, if something that we imagine fails because we are crossing domains of operational coherence. So, if you take genetics for example in terms of nucleic acids or the cell physiology, we can do anything that we imagine provided with respect to operational coherence of the nucleic acid and the proteins and so on and so forth. But this is local. What happened with systems for these systemic relations?

Now, when you relate a systemic view with the local view, then you have understanding. And then other things come into the fold it's not any more a question of arrogance that they can do whatever I wish because they can manipulate a locality. Even this present discussion about cloning and things of this sort is this open to reflection only if you look at what has been done or can't be done with the cloning in the broad context of the biosphere or the human domain and the culture. But certainly, we can do. I mean, this cloning, is it a surprise? Not surprise at all.

An honest biologist should not show any surprise, to show surprise only so that you impress other people to give you money for going on with this. If the dynamic coherence of the physiology, no problems you can manipulate it. Now it requires work and dedication to know how to do it, yes. But there is no surprise whatsoever. But the problem is not in there, is what shall we do with this? And that requires a systemic view and connect the local with the systemic and this is understanding.

And then ethics will appear in terms of the purpose. What is all this for? What do we want? And this is why people say, and there are many ethical problems, ethical question. And the ethical question has to do precisely with that, with understanding and with the human domain

or the biosphere domain, which we are going to apply what we can do. But there is talk of arrogance in this reductionist approach with respect to genetic determinism, which I think is a pity, because it's a hindrance. This is a source of difficulty for responsible, ethical use of science.