

Dr.med. Ursula Davatz, Prof. Dr.med. Luc Ciompi

24.7.2021

Where does schizophrenia come from?

[Audio](#)

[00:00:02.540] - Ursula Davatz, MD

Dear Luc Ciompi, I am very pleased to welcome you for a second conversation together. We are both specialists in the field of schizophrenia. You have done a lot of research in it and I have done a lot of therapies, among others with schizophrenia families, so I have looked at those. As a guiding principle, I call our conversation "Where does schizophrenia come from?" I'm coming from my field of experience now. When I look at all the schizophrenia families that I've treated, accompanied, something like that, I always look for patterns. That's where the pattern came to me, and I'm making a pun now. Acute schizophrenia occurs when the system itself, that is, the family system, would have to shift something, change something. The patient who then gets the psychosis then becomes "crazy" in the colloquial language. So it's the same word again. In Swiss German you also say "I'm crazy", "I'm angry". So there are a lot of emotions involved in this craziness. I have made the observation that something in the system should be shifted. But the system has resistance to it. It is the schizophrenic who actually draws attention to something. But of course it is not always possible to shift this system in such a way that the index patient no longer has to be crazy.

[00:02:12.170] - Ursula Davatz, MD

I'm always working on it, trying to do that, and in the end I had another story like that and thought, yes, I have to tell the parents that I'm done with this, let's say, hypocrisy. The truth has to come to the surface. Before that, your son can't become normal. These are such thoughts. I ask myself then, and I can ask you, you have had to do with the schizophrenia families, what are the handicapped moments that shackle the system, the restrictions that the system cannot change, cannot shift, moral, social, religious, and also political depending. Then as a further, of course, I say, please tell me your hypothesis, your explanatory model of schizophrenia. But if you could go into that a little bit first.

[00:03:23.810] - Prof. Dr.med. Luc Ciompi

Yes, so what are the impediments that slow down, that make a family system not want to change. First of all, I would like to underline what you said, that there are strong emotions involved. These are actually always, even in my view, namely before the onset of psychosis. You once spoke of an emotional tsunami, there is a lot going on in the family, there are fierce tensions, there are antagonisms, there are taboos by name as well, there are frequent secrets that one is not allowed to talk about, unpleasant incidents that arouse emotions and what prevents one from addressing these taboos or also traumas, conflicts, incidents of all kinds that can happen in a family history, that is most unpleasant to do.

I see in this fact that touching a wound hurts. Therefore, one tries to cover up this wound much rather and to do as if nothing at all would be and at least just what it is about would not be. Yes, I think that is the most common and the most important reason for inhibition. Of course, one can also mention all kinds of social, conventional, and perhaps even political, in a small sense, political obstacles. Conventions are often violated, social conventions. Maybe something like a family reputation or a family facade is at stake, a bourgeois one let's say, but it happens in all kinds of families. It's an example a nice appearance that you can of course for very many social reasons up to maybe, yes, if someone has a position that they don't want to put in jeopardy, especially today, where as soon as something somewhere isn't quite right, then that's in the media, that's in the social media, that's centered. Those are the barriers that I see, first and foremost.

[00:06:35.560] - Ursula Davatz, MD

Yes, I think that resonates well with me, I can only agree. If you could explain your theory or your explanatory model of schizophrenia? If you could explain a little bit there, how you arranged that for yourself.

[00:06:53.420] - Prof. Dr.med. Luc Ciompi

I will try to do this very briefly, but it is not easy, because schizophrenia is a highly complex disease. There are many factors that have an effect, and so to bring it down to a single denominator, a short denominator, threatens to oversimplify the matter. But I think to start from this emotional tsunami, from this emotional tension situation that we have been talking about, that also applies to my understanding of schizophrenia. I've been particularly concerned with the emotions and what the emotions do to us, particularly to our thinking. They change our thinking, they change our ways of looking at things. In my understanding, a branch of science called synergetics, the interaction of factors, but also especially then, that interaction of emotions plays an important, I would say central, role in the outing of psychosis. We are also back to this tsunami. If in a system we are both system theoretically also oriented, if in any system, not only in a psychic system, in a social system, but also even in a chemical or physical system the energetic tension rises to a critical point, then the pattern of the system overturns. The overriding pattern. So if we think of a psychological system, a family, a group, a business forms a system. If we pump more and more tension into it, if there are things going on that make tremendous conflicts, that make people angry, that make people sad, insecure. So when the tension rises critically, then at some point it pops, so to speak. Something happens. Either someone snaps, or someone kills himself, or someone goes crazy, or the system goes crazy. Or the whole thing collapses. In any case, the usual functional pattern no longer works. Under certain circumstances, which in my opinion are only partially clarified and are based on certain vulnerability factors, it can happen that the system, the whole system collapses due to the craziness and perhaps one or, more rarely, the whole system, when everything goes haywire. That is a, I think we are on quite common ground. These are important elements of my

understanding of schizophrenia. Then there is a lot more to it, which I don't want to talk about very intensively now. But you have recently seen an article of mine, which also talks about the so-called embodiment. Embodiment is a new branch of science for something that is actually well-known, namely that our emotions, but in a certain sense also our entire thinking, that is, the psyche is anchored and rooted in our body.

[00:11:27.240] - Prof. Dr.med. Luc Ciompi

When I get angry, then I turn red, then my heart goes up, then my pupils dilate, and many other things, or I sweat, many other things. So there are no stronger emotions without corresponding physical changes. It has also been shown that thinking is somehow anchored in the body in various ways. The memory, one talks of a body memory lately. But it is something banal. As a child, I learned to ride a bicycle, to ride a bike. I can do that now. It's my body that knows that. I don't know it anymore. How to do it. This embodiment also plays a big role for me, because in schizophrenia there are also very many bodily misperceptions, namely seen from the school of phenomenology, that play a very important role. There find certain people are of the opinion that the very roots of schizophrenia could lie in a wrong body or altered body perceptions. And there is another element that has become increasingly interesting to me in recent times. That is this Free Energy Principle, free energy by Carl Friesen. He is an English psychiatrist and mathematician. He has mathematically proven, in various ways, it is complex to read, but nevertheless, that actually the system, that is, the physical system, the mental system, the body system, the organism, but also each individual subsystem, that is, up to the cells to the brain, that they are all constantly striving to keep the energy loss as low as possible.

[00:13:42.100] - Prof. Dr.med. Luc Ciompi

So no free energy, that means no surprises. Thus, in order to exclude or minimize these surprises, there is something like an implicit model of reality. That which the organism makes for itself. So when there is lightning, there is thunder. These are things like that, correlations. When this happens and that happens, or when there's a hole, then I have to pay attention. All these things, they are stored in an implicit internal model. The living organism also tries to avoid this, that is, not to fall into the hole or to panic when it thunders after the lightning. Sometimes it thunders quite violently, then there is lightning, then there is thunder, then the world is all right again, so to speak. All these elements play together in my opinion. I'm sure this all sounds very complex. I think you can, to simplify it, go back to this tsunami image. High emotional tensions, they make certain people crazy, which then also shows how one can at best proceed therapeutically, namely to sustain these tensions, not just to minimize them through a small tension exercise.

[00:15:30.000] - Ursula Davatz, M.D.

I'll try to put some thoughts on what all came to mind. I'll have to see if I can get it together when I start on the emotions. So it's true that when acute psychosis breaks out, the whole family is in turmoil and everything is in turmoil, and the patient

of course, too. My first reaction is always to shut down, do nothing, do less. So I actually always have to calm the system down. If I myself am calm and not nervous, then I can do that. But if I'm also somehow under time pressure and restless, then everything falls apart. That's when I say this saying "You never have a second chance to make a first impression". If a schizophrenic family approaches me and they find me unsafe, I can forget it. I really have to be absolutely sure. So to be able to keep my calm. Speaking of emotions, most schizophrenias occur in young adulthood, puberty, young adulthood. People always talk about controlling emotions. So the young person has to learn to control his emotions. The child doesn't have to do that yet. The mother, the child or the father must calm them down. When you become an adult, you should have some control over your emotions. I might first come to the embodiment. In the occidental way of thinking, one has separated mind, body and soul. For understanding schizophrenia at all in general, for medical understanding, that's actually not a good thing. Especially in schizophrenia, so the body is now slowly playing more and more of a role, people are doing body therapy, and so on. But in thinking it is often still separated. For two years I gave continuing education to nurses who had become nurses in the second course, that is, in the second half of life, psychosomatics. Then I always thought about psychosomatics and then I always looked for proverbs, so the fright in the neck, what is on my stomach or what makes me sick.

[00:18:14.820] - Prof. Dr.med. Luc Ciompi

It sends shivers down my spine.

[00:18:16.940] - Ursula Davatz, MD

Yes, exactly. And so on. There are so many good proverbs that make no boundary between mind and body. It's all still together and there's a lot of wisdom in it. From there, I think we have to create this unity again in medicine and think back and forth. Our organ that we are researching is the brain, and when I examine and look at it more closely, I always use the model of the "Triune Brain" by Paul D. MacLean. In the new modern neuroscience, this is perhaps outdated. He built on the three hemispheres of the brain, the reptilian brain, that is, the brain stem with the cerebellum, which is part of it, that are the automated movements, that we can ride a bicycle. Then the middle brain, the limbic system, which controls or contains, houses the emotions. And then the cerebrum. He specifically says "triune brain," so it's not a hierarchy.

[00:19:37.080] - Prof. Dr.med. Luc Ciompi

The threefold, the threefold brain.

[00:19:40.880] - Ursula Davatz, MD

Yes, you can say. Not simple-minded, but three-fold. Depending on the situation, a different brain takes over. The tsunami, it probably originates in the emotional brain, and then it floods, it can flood the cerebrum, and it can also flood the brain stem. In the preliminary phases, before schizophrenia breaks out, you often have other symptoms, depression, rituals, compulsive behavior,

so all behaviors that belong a little bit more into the brain stem, so into the reptilian brain. When the psychosis breaks out, the cognitive brain, the cerebrum, is flooded and then everything collapses. Now, when I talk about tidal wave, In the "Zeit" it has had an article last week about the gut feeling and intuition. The article starts with the millennium wave that a surfer from Hawaii rode off. He has behaved in a way according to usual surfing behavior completely wrong. He leaned back and stretched his leg in front and he rode the wave. How did he manage to do that? He was able to do it, of course, because he has ridden off so many waves, but at that moment the usual laws are gone. He had to use something else. His body could do it. I'm switching now from affect logic to intuition.

[00:21:40.800] - Ursula Davatz, MD

That is the good side of the logic of affect. Through his quick decision-making ability, through his intuition, which is always quick, he grasped the moment correctly and survived. In this sense, we in the Western world and with our education are very strongly influenced by our intellectual abilities and if these fall away, and in the case of the schizophrenic they fall away, then the person is worth less. But that's not necessarily true. I say yes, the schizophrenic is usually very sensitive, and they notice things that perhaps someone else is better at suppressing. In that sense, before the emotional monster wave, there's a lot of, like you said, stress hoarding. They notice all kinds of stimuli, notice situations that somebody else might not notice. That's where Eugen Bleuler even said, schizophrenics perceive things that normal people don't perceive at all. That's true. They take in much more and at some point it explodes. I think it's a biological law that when a system is overtaxed, when it reaches its limits, it jumps over. For a while, people said "Natura non facit saltus," meaning nature doesn't make jumps. But that is not true.

[00:23:26.320] - Ursula Davatz, MD

In the biological system, the jumps make. The brain makes the jumps. A sea that is polluted, or a lake, can still compensate for a long time, but at some point it can no longer do so, and then it turns around. I think that's how it works in the brain. Then the whole system collapses. It is overstrained. So the people who then become psychotic, their emotion control and regulation, that is, their emotion regulation, fails. Then, I could say more primitive, I'm already evaluating again, but other behaviors, emotional expressions come into play, into expression. Does that make sense?

[00:24:25.440] - Prof. Dr.med. Luc Ciompi

Yes, yes, I am with all of that.

[00:24:28.020] - Ursula Davatz, MD

Totally agree. Maybe even now I'll go back to your family and your mother. You reflected her in your book, "Ciompi," you said, the crazy mom or something like that. In the normal world she appeared crazy. But she made a decision at that time. It was very clever. She forbade you, the elder, and your sister to go to school. Her

have benefited greatly from it. You had every freedom. That was a wonderful school of life, I can well understand that. That was one thing. But later it came out that there were ideas or intentions that wanted to kidnap you as children. So your father's family wanted to kidnap you. Because you were children of your father's family and children of your mother's family. In that sense, with wise intuition, she forbade you to go to school, because if you had gone to school, your behavior would have been predictable. You could have been picked up from school and then it could have happened. By releasing you and telling you not to go to school, your behavior as you walked through the forest was not predictable at all. That was the salvation. So no one could pick you up at school. So highly intelligent, highly intuitive, highly skillful, and situationally appropriate. So all kudos to your mom.

[00:26:34.340] - Prof. Dr.med. Luc Ciompi

Yes, yes, I am also of this opinion that one can see it that way. After just this taboo then came out some time, that the whole, so one must perhaps still say that the marriage of my mother with her husband in Italy, she was Swiss, that the relatively early more or less went to pieces. My mother went with us to Switzerland and then came the war and then came all kinds of things and in this, it was even in the war situation, the family of my mother or my father or my father, as then his sister told us, wanted to kidnap us effectively and there were very clear plans, via Jesuits in Switzerland, the beds had already been made, our aunt, so my father's sister, then betrayed us later once. That was very concrete. It actually turned out that this crazy behavior of my mother not to send us to school anymore, we were between nine and eleven years old at that time, was actually a good thing. It would not have been a good thing if we had gone to this then chaotic Italy, where very soon afterwards the front between the Allies, who were coming from the south, and the Germans, who were still trying to defend Italy, was exactly there, along the Arno, where we would actually have been.

[00:28:31.790] - Prof. Dr.med. Luc Ciompi

There was a lot of bombing and so forth, but that's just in passing. So in that light, effectively, my mother's craziness doesn't seem so crazy.

[00:28:44.510] - Ursula Davatz, MD

No, that wasn't crazy at all. That was super intuition. She pushed through it, away from the norm. You'd actually have to go to school. But it was very clever. If I say something further about intuition, and we go back and forth there from living human systems to other biological systems, that was also in this article, Gerd Gigerenzer says that intuition is actually a brilliant achievement of evolution. What you said about free energy. Nature tries to leave as little free energy as possible, so it binds it, actually, and evolution, it also shows us, it is very efficient. So it's always about making adaptations, saving energy, etc. You can't afford to waste so much energy. Gerd Gigerenzer mentions a funny term, which I wrote down, "ecological rationality", i.e. ecological wisdom.

[00:30:08.920] - Prof. Dr.med. Luc Ciompi

Yes, I also immediately find that a very good concept.

[00:30:14.630] - Ursula Davatz, MD

We are now going into a wave of eco and so on and so forth. A lot of it is still just lip service. In my view, the understanding is not always so profound, especially in the medical field - I'm saying this now - and also in the psychiatric field. But I think we could make some use of this concept.

[00:30:39.110] - Prof. Dr.med. Luc Ciompi

That's very good, yes.

[00:30:43.710] - Ursula Davatz, MD

There I still quote now, this comes also from this article of Albert Einstein, who obviously said: "The intuitive spirit is a holy gift, the rational mind a faithful servant".

[00:31:07.890] - Ursula Davatz, MD

We have the tendency nowadays to turn much more to the rational mind and to believe in that and to neglect the intuitive mind rather a bit. I think it would also be good for science that we emphasize something there. Then I can give again an example of Johannes Kepler. Johannes Kepler first dreamed that the disciples were around Jesus and then he calculated the planetary orbits in eleven years. So sometimes it needs such intuitive thoughts that come to the surface and which one calculates only afterwards.

[00:32:01.100] - Prof. Dr.med. Luc Ciompi

I have not met this dream of Kepler yet. He has dreamed this quasi as an entrance gate to his researches about the planetary orbit. The chickens would go around Jesus. Very funny, I did not know that.

[00:32:19.870] - Ursula Davatz, MD

The same thing happened with the benzene ring. This is what one hears in medicine. August Kekulé dreamed of the snake pointing into the tail. Then he thought, no, it's not linear, it must be circular. That's how biological chemistry came about.

[00:32:41.400] - Prof. Dr.med. Luc Ciompi

If I can interject something small. The book of Arthur Koestler, the divine spark is called it, there exactly such things among other things the benzene ring and other are pointed out and which is interesting for our topic, thus Arthur Koestler, has creativity, artistic creativity, humor

and scientific creativity are all actually traced back to such intuitive premonitions, because he didn't make the bridge to going crazy in his book, but I then took that up when I developed the logic of affect and tried to make a bridge. So these intuition things, that is something highly interesting.

[00:33:56.970] - Ursula Davatz, MD

In the statistical studies, it now comes out that in families with schizophrenia or manic depressive, that there are also increased artistic abilities.

[00:34:13.100] - Prof. Dr.med. Luc Ciompi

These are non-conventional thought processes that have two sides. They can freak out and seem or be crazy. Or they can reveal something new.

[00:34:32.420] - Ursula Davatz, MD

John Forbes Nash Jr is the famous example in "A Beautiful Mind". So he was psychotically wandering around the grounds of Princeton for almost 20 years, I think. Then at some point he decided to go back to normal. They say he was put on medication. But he says no, he didn't take any. Then he got the Nobel Prize for game theory.

[00:35:01.620] - Prof. Dr.med. Luc Ciompi

Yes, this is madness.

[00:35:02.640] - Ursula Davatz, MD

Yes, that's incredible.

[00:35:04.210] - Prof. Dr.med. Luc Ciompi

Madness.

[00:35:04.850] - Ursula Davatz, MD

Yes, exactly. There we go again with the word. It's madness. It's extreme things.

[00:35:15.000] - Prof. Dr.med. Luc Ciompi

That is why schizophrenia is so fascinating, because it touches the border between many very interesting psychological phenomena.

[00:35:27.150] - Ursula Davatz, MD

I then thought even more about how does the brain jump around? How does it get the tensions? You've already said some things. How does the function jump away from the ratio to the

Crazy and of course also highly interesting. I then also coined a word like that again. I said the schizophrenics, they communicate via crypto-communication. Very nice, yes. It's always an encrypted communication.

[00:36:09.120] - Prof. Dr.med. Luc Ciompi

I am of exactly the same opinion.

[00:36:13.220] - Ursula Davatz, MD

They actually communicate with metaphors. Through the Bible, we have partly learned to deal with metaphors. Today it is no longer so common to use metaphors. But when a schizophrenic tells me he sees black shadows or he hears those voices and those voices. When I was a student, I was still taught that all this cannot be seen, that you can't do anything with it. But I always try to decipher this crypto-communication. I tell some patients this directly, I say that this shadow is their bad conscience. Then I look, why does he have a bad conscience. An intelligent young man has dropped out of education, lost all his jobs, has a guilty conscience. He smoked hashish, became psychotic, and to his parents he has a guilty conscience that he didn't get ahead. Some people get into that, too. I then always actually try to bring these feelings that they have and that they also repress, that they project outward and project onto someone else or project onto some figure, I try to bring them home and locate them again in the emotional world of the person.

[00:37:44.060] - Prof. Dr.med. Luc Ciompi

I am of the same opinion. From my point of view or in my habit, I explain exactly the same as you have said now, with the dream. We know since Freud among other things that the dream is not senseless, even if it seems crazy, what one dreams only nightly sometimes therefore. But one knows that it has meaning. It has relations to experiences, to hopes, to fears and so on. It is exactly the same with the schizophrenic symptoms, with the strange behaviors, with the hallucinations, with the delusions. They make sense, but hidden crypto-sense.

[00:38:42.530] - Ursula Davatz, MD

They all make sense. You can't always figure it out, but I always try to look and when you do figure it out...

[00:38:50.780] - Prof. Dr.med. Luc Ciompi

Then you can do something with it. Can establish communication.

[00:39:05.950] - Ursula Davatz, MD

Another question: You know my hypothesis and my conviction. One has always looked for the genes and the environment in schizophrenia. In English they say "nature versus

nurture". Is it the genes or is it the environment? I think we agree that it's actually always both. Of course, I then looked at the genes. My firm belief is that ADHD and ADD is a genetic constellation that is vulnerable to developing schizophrenia. But not only schizophrenia, also bipolar disorder, major depression, delinquency, that is, misbehavior in the social domain. If I pick out two characteristics of these people, one can of course say many other things, then one is the high sensitivity, very easily vulnerable, partly also high sensitive perception, so again what Eugen Bleuler said, they see more than we normal people see, and on the other hand the impulsivity. Impulsivity can lead to this monster wave, to this emotional tsunami. In this sense, children are much more difficult to educate. So they are quickly hurt, if they defend themselves emotionally, they then become aggressive, then you have to discipline them, then they don't feel understood and then a vicious circle happens. They can also, when they feel hurt, more the ADD kids then just withdraw, then you can't get to them and then a vicious cycle happens again.

[00:41:10.860] - Ursula Davatz, MD

So the more they withdraw, the more the environment talks for them and that then gives these autistic people who only live in the inner world. In this sense, such children cause much more unrest in a system, more educational difficulties and more distortions. If the system is already weakened for various reasons, it can be illness, financial problems, etc., then the system is weakened. If the system is already weakened, it is not able to address all these needs of these children. Then I see an illness developing. Not only mental, but also physical. I have adult patients who come from an ADHD family and then by the time they're 50, some of them are already or a little bit older, they're a physical tails. I think of a man who was a boy, was diagnosed as a POS child. I say that's the same thing to me. Today you would say ADHD child. The mother came from a family that was not intact, so she did everything she could to make this boy a perfect boy. He was wild and rascal and so on. Has integrated well at work. Humanly, privately, nothing and now he is in physical tailcoat, so x diseases.

[00:43:03.240] - Ursula Davatz, MD

There I think, yes, there is that his brain, his body, his vegetative system has been tamed down much too strongly as that he could have developed. I'm asking you now, what's your thinking about my hypothesis? I don't know how you've dealt with ADHD.

[00:43:32.040] - Prof. Dr.med. Luc Ciompi

I have known this hypothesis for a long time.

[00:43:33.920] - Ursula Davatz, MD

Sure.

[00:43:34.660] - Prof. Dr.med. Luc Ciompi

We've known each other for a long time and you've also written a book and I've even written a foreword to it there, which argues this thesis. So I'm going to say my opinion about it today. I think there's certainly something to it. I think there is something to it. In this respect, I would like to add that this ADHD, Attention Deficit Hyperactivity Syndrome, i.e. attention deficit disorder and hyperactivity in essence, is not as new as one might think. Since the 90s, it has suddenly become incredibly fashionable, especially because of Ritalin. It was noticed that the drug Ritalin, which is actually a stimulant, sometimes works wonders. Then the pharmaceutical industry became very interested in it. But the whole thing, so already in the 60s, in the 70s, there was talk about the so-called POS, psychoorganic syndrome, or minimal brain syndrome. These were such attention disorders, cognition disorders, partly behavioral disorders. Already at that time, the assumption was made, and to some extent also proven, that sometimes, not always, in the run-up to psychoses, that such POS children can, let's say, become psychotic under certain stress conditions. That was actually said at that time. What you are saying is essentially the same thing. You say this ADHD syndrome can lead to anything. It is by no means obligatory that it becomes schizophrenia.

[00:46:05.240] - Prof. Dr.med. Luc Ciompi

One also speaks in schizophrenia theory and science since the 1970s at the latest of vulnerability, so-called vulnerability concepts, which J. Zubin and B. Spring, these are two American researchers I have met. They first formulated this hypothesis in such a way that it then became more or less common knowledge. Vulnerability-stress-hypothesis, vulnerability, so there is a vulnerable terrain and on it, when certain stress situations come, then it can come to madness, to craziness. So in this respect, what you represent, I say, there is certainly something to it, there is something to it. You also represent it with a lot of conviction and emphasis, sometimes you cause a little offence, as far as I have perceived. You are sometimes accused of being too one-sided. But if one listens to you carefully, you are not one-sided, but you say that this is not an obligatory way. It can also become different things. It can be schizophrenia, it can be depression, it can be aggressive behavior, it can be anything. Emerge on that vulnerable terrain, and to that extent I think that's a useful hypothesis. As much as I know, and what I know is, these days I am an old man and long out of touch with what is known.

[00:48:11.960] - Prof. Dr.med. Luc Ciompi

I am even convinced that nobody can know everything. Even about such a circumscribed problem as schizophrenia. As far as I know, that's what I wanted to say, this hypothesis is only insufficiently empirically proven. These are educated guesses. There are studies that certainly speak in favor of it, but one can, I think, so with reservation, based on my knowledge, I don't think one can speak of an established fact there yet. That's the way I see it.

[00:48:59.300] - Ursula Davatz, MD

Who were the researchers who linked POS and schizophrenia?

[00:49:09.620] - Prof. Dr.med. Luc Ciompi

Reinhard Lempp was a very well-known German child psychiatrist in Tübingen. He made this link in several books between the POS, i.e. the Minimal Brain Syndrome, these disorders, where also a hereditary factor is known in it. There were certainly more studies, but I can't quote them now.

[00:49:59.290] - Ursula Davatz, MD

He was a child psychiatrist?

[00:49:59.830] - Prof. Dr.med. Luc Ciompi

He was a child psychiatrist, professor of child psychiatry in Tübingen.

[00:50:04.260] - Ursula Davatz, MD

But was Reinhard Lempp's theory ever taken up by adult psychiatry?

[00:50:11.930] - Prof. Dr.med. Luc Ciompi

Reinhard Lempp was very well known and very well respected in Germany, but how.... He was certainly not the only one to argue this thesis, but nowadays, what is based on German is provincial, not as far as I know Reinhard Lempp hardly published in English, so was hardly well known in the English-speaking world. That's the handicap of people who don't publish in English? Nowadays, everyone publishes in English, because otherwise they are not noticed at all. That was in the 60s, 70s, 80s.

[00:51:06.040] - Ursula Davatz, MD

When you say there is no empirical evidence yet, I always use these GWAS, the Genome Wide Association Studies, where they tried to look at the gene set and then analyzed it in relation to different diseases. It came out that schizophrenia, bipolar disorder, major depression, autism and ADHD, so the same or strongly overlapping gene locus.

[00:51:42.460] - Prof. Dr.med. Luc Ciompi

That would be good empirical evidence.

[00:51:51.360] - Ursula Davatz, MD

One was then really very astonished, and it was repeated again, but now I don't see anything about it. So somehow it was not taken up by the psychiatrists. I don't know why.

[00:52:05.180] - Prof. Dr.med. Luc Ciompi

This study you cite is from when, do you know?

[00:52:10.280] - Ursula Davatz, MD

I forgot to mention it in my bibliography. I was then resented or criticized for that. 2019.

[00:52:25.700] - Prof. Dr.med. Luc Ciompi

My experience is that the theses that are not quite so common need a lot of time in science, especially in psychiatry, because very often there is more circumstantial evidence than in physics quasi hard evidence. Until a new paradigm is established, it takes decades in schizophrenia.

[00:53:01.040] - Ursula Davatz, MD

I always quote Barbara McClintock. At the age of 40, she proved or established the translocation, something in the genetic field. 40 years later, at the age of 80, she was awarded the Nobel Prize. Because it simply didn't fit in with the current theory.

[00:53:29.800] - Prof. Dr.med. Luc Ciompi

There are many such examples.

[00:53:39.620] - Ursula Davatz, MD

I ask that now nevertheless, from your view where should one - to each little animal its Pläsierchen - everyone should do what he can well and makes gladly. Where should one advance more in the area of schizophrenia research nowadays? That would be your focus?

[00:54:09.200] - Prof. Dr.med. Luc Ciompi

There I have to make reservations again. At my age, I no longer overlook everything that happens. I can't really validly say there's a gap and there's too much done there, etc. These are impressions based on the information available to me. That caveat made, I find there are two areas for me where there is a huge research deficit and which I see as very important for schizophrenia. The first one touches considerably on your view, your hypotheses. It's about vulnerability. What is this schizophrenogenic vulnerability? Why is it that vulnerable people, for example, with an ADHD, but also with other vulnerability factors, trauma or others, some become schizophrenic, some become depressed, the third become aggressive or have an aggressive and personality disorder, as they say today, they used to say psychopathic behavior, and the fifth, it doesn't do anything to them. That is for me one of the important, big, unsolved mysteries, where in my opinion still much more research is necessary than that, which I can perceive still approximately now that it happens. The other area, also highly important in my opinion, is why do certain schizophrenias heal? What are the factors that make it so? I myself conducted large long-term studies in the 60s, 70s, where we studied hundreds of schizophrenics, among others, but also other diseases,

but we're talking about schizophrenia now, schizophrenics have followed up, 30, 40, 50 to 60 years, it was 37 years on average, after their initial hospitalization.

[00:56:52.960] - Prof. Dr.med. Luc Ciompi

It has been shown and with the question, what has become of them, it has been shown that about a quarter was cured. That another quarter was improved and that the remaining 50 percent were either bad or even very bad, that they were bad. But what the factors are, it's not drug factors, it's not other therapeutic factors, at least as far as we could find out. It's to some extent probably certain personality-structure factors. The only thing we could find out with some probability is life circumstances. Some people find certain niches, favorable niches, and suddenly it goes again. Even without therapy. We are far from being the only ones who have done such long-term studies. In Switzerland, Manfred Bleuler, among others, has done such studies. In Germany, the research team of G. Huber and R. Schüttler did studies almost at the same time. We all found out about the same things about the long-term courses. It is certain that a part, rather a minority, but still a quarter to a third of schizophrenics heal. That in itself was a tremendous result. Even today, some people don't believe that. Although we found that out 50 years ago, and in fact there are at least 20 to 30 studies in the world that confirm that, because I know that, because of course I follow them a little bit.... I have collected them. This knowledge is far from really penetrating medicine and psychiatry as a clear, certain fact, but it is. So my, I think that should be fully noted, first of all, and researched, secondly. There's a deficit there.

[00:59:34.690] - Ursula Davatz, MD

Yes, I agree with you on that. In the popular mind, people still think that schizophrenia is not curable. Even the medical profession has written off the have attitude, oh dear. Yet the other evidence is there.

[00:59:51.250] - Prof. Dr.med. Luc Ciompi

To add to this, in our studies there were people who were crazy for 15, 20 years, were schizophrenic, and then late recovered. Others recovered very quickly after one or two psychotic episodes. We have statistics on that. I'm just saying that even if someone is sick for the longest time, that doesn't mean that they can't turn around in the next 10 or 20 years, under favorable circumstances.

[01:00:36.640] - Ursula Davatz, MD

You would have to be able to examine the psychosocial environment much more closely. That is, of course, very time-consuming.

[01:00:45.640] - Prof. Dr.med. Luc Ciompi

That is also difficult.

[01:00:48.140] - Ursula Davatz, MD

Difficult to categorize. That's probably why it's not done.

[01:00:56.000] - Prof. Dr.med. Luc Ciompi

Yes, to shoot a little provocative arrow there. If you do a neurobiological IRM study of so and so many people and then the brain findings and then see what happens over a year or two. Then you can do a publication. If you don't publish, and predominantly also in this area, in the neurobiological area with the modern technical means, then you don't make progress in today's university psychiatry landscape, predominantly. That's a bit of a gross oversimplification. But it's a jab at the short-term perspectives and the purely neurobiological perspectives. Those are both interesting and right, but there are long-term perspectives, there are psychosocial realities, there are social, societal realities, for example urbanism is an overt risk factor. Why is there now a Lausanne team researching this, interestingly enough. It's not just the brain and the synapse mechanics.

[01:02:25.440] - Ursula Davatz, MD

Yes, I always say that the brain is a social organ and it is influenced by the social environment and also changes. This should be taken into account.

[01:02:35.920] - Prof. Dr.med. Luc Ciompi

But to be fair, these are of course highly complex interrelationships. That's why it's perhaps no wonder that people can't simply see through them right now.

[01:02:54.810] - Ursula Davatz, MD

I also worked a lot with addiction patients. Then we also looked at who was getting out of addiction and who was not. A very simple factor was, I don't know all the details now, that the addicted patients always had a caregiver who believed in them, which could be a parent, a sibling, a teacher, a friend. A relationship aspect.

[01:03:24.880] - Prof. Dr.med. Luc Ciompi

Very interesting. We found similar for rehabilitation chances.

[01:03:30.670] - Ursula Davatz, MD

I believe that. Someone in this world who doesn't give up. In that sense, when I accompany schizophrenia or difficult situations, I try to maintain that, also to pass it on. I think there is still a development in that.

[01:03:56.840] - Prof. Dr.med. Luc Ciompi

It is very important that the families, the relatives, do not simply say, yes, now the diagnosis is there, lost, and therefore nothing can be done.

[01:04:06.680] - Ursula Davatz, MD

Untreatable. It's not always easy, so people go through difficult situations. I have one last thought. I'm very interested in evolution, after all, and I'm also always looking at all things, what's the evolutionary value of that? In that sense, then I got into the sociobiologists or ethologists, like Edward O. Wilson. He wrote such a great bible on sociobiology. An interesting primatologist is Franz de Waal. He's written several books and it's easier to observe the animals and how they behave socially because there's no preconceptions, or you've put those away now, you don't look at them with anthropocentric, human-centered views anymore, you just try to observe. Have you looked into that? I wonder why doesn't psychiatry use more from that area? There was a famous research by Michael Meaney. He specializes in biological psychiatry, neurology and neurosurgery, so he's not a medical doctor with the "high licking mothers" and "low licking mothers." That is, the rats who lick their little ones a lot. These rats, or is it mice? I think they are mice. So they're much more resistant to stress. So they can take more.

[01:06:00.380] - Ursula Davatz, MD

Then there are lowlicking mothers and these little ones, when they grow up, they are less resistant to stress. But then there were adoption attempts. The children of lowlicking mothers were foisted on the highlicking mothers. These mothers also licked them a lot. Then they were also resilient, that is, resistant. So the social environment plays a big role. In Tienale's studies, it also came out that if the family was disturbed, then the vulnerable genes came through. If the environment was normal, the vulnerable genes did not show through in schizophrenia. That actually shows everything, how the environment is so crucial. I think, yes, we would have to go more to the sociobiologists or ethologists and see what their experience is.

[01:07:09.370] - Ursula Davatz, MD

Have you dealt with it?

[01:07:11.140] - Prof. Dr.med. Luc Ciompi

Yes, I have not delved into sociobiology.

[01:07:19.320] - Prof. Dr.med. Luc Ciompi

You quote E. O. Wilson, Frans de Waal, I know a lot about it. After my retirement, which was a long time ago, in 1994, I was a visiting professor at the Konrad Lorenz Institute in Vienna for about one and a half years. There, of course, it was all about evolution and the whole research institute was actually in the wake of Konrad Lorenz's research was designed to study the behavioral patterns of

animals in their evolutionary processes, how this has developed, and to establish the relationship to humans. One of Konrad Lorenz's goals was actually to understand the human mind, based on animal behavior. If I understand correctly, that is virtually identical to the field of interest of sociobiology. Less from those sociobiologists you quoted than from my work at the Konrad Lorenz Institute, I took away the conviction that there is a great continuity between animal and human behavior, feeling and thinking. One can say it also differently, one can say that the human behavior, feeling, thinking did not appear simply in such a way one day and then humans were there and functioned in such a way, as we function now, but that millions, thus several millions to very minimum processes are, of which, thus one can 80 million years back up to the beginning of the primates.

[01:09:49.960] - Prof. Dr.med. Luc Ciompi

Creatures similar to humans have been proven about three million years ago, three to four million years ago, and then they have also developed further and further with the brain development and obviously with the behavior. In short, I just want to say that I think I'm very interested in sociobiology and I think it's a very important science, as you do, because first of all it shows a certain continuity between how animals behave and how humans behave. Especially in the field of emotions, it's quite certain that the animals have very similar, that our emotions are rooted in the emotions of the animals actually and have developed further, have differentiated further. What you have also emphasized very much, to this sociobiology also belongs the environmental effects and also there I am actually quite from my point of view completely of your opinion.

[01:11:14.380] - Ursula Davatz, MD

Beautiful. I was an admirer of Konrad Lorenz when I was 18. I read the book 'How Man Came to Be a Dog'. For a while, Norbert Bischof, the psychologist here in Zurich, always offered guest lectures on Fridays. I went to these for a while and then also experienced Primark, as he told how he learned the monkey to talk. Maybe one more thing, Jörg Hess, a primatologist in Basel, we once attended a guided tour by him and he said that the gorillas can read facial expressions better than we can and he has only learned about 50% of what they can do in his long research phase. Because we just go for the words and the meaning, we listen more to that and then we are not so used to reading the facial expressions. When we as family therapists somehow got stuck in a session, then we turned off the sound, then we had to read all the gestures, and then the behavior comes back, the facial expressions, the gestures had to be looked at and then you can go deeper. So you suddenly understood better what was actually going on.

[01:12:49.920] - Ursula Davatz, MD

I also experienced when I traveled to countries of which I did not know the language, I had to be much more attentive, what is he thinking now, what is going on there now. Observe. I experience the same with mentally handicapped people. I don't have so much in treatment, but there I go again like back to animal research. I have to get people to observe. What was there? What was

there? Only when they observe better do they learn how to deal with these people. That's where we meet again.

[01:13:36.090] - Ursula Davatz, MD

Okay, Luc Ciompi, thank you very much for coming. It was very interesting for me. I hope it wasn't so exhausting for you either.

[01:13:47.250] - Prof. Dr.med. Luc Ciompi

Yes, I thank you of course also for the invitation to this conversation. We have very many common interests and also very many common orientations, I would say, in our understanding, namely of this fascinating phenomenon and difficult phenomenon of psychosis.

[01:14:07.810] - Ursula Davatz, MD

Beautiful. Thank you very much.