



CLANDESTINE TALKS

PARADOX

THINKING HEAD

24TH APRIL 2025

/ Hello, this is the “Clandestine Talk”. I’m Diego Donna, an historian of philosophy at University of Bologna, and we are broadcasting from the attic of Mambo Museum, which is hosting this session of the “Clandestine Talk “about the idea of paradox. This is a pretty strange place, I’ve never been here. It really feels like a secret hideout. I’ll tell you more about myself in a minute. But first I want to introduce my three friends and colleagues. So I ask you to say a few words about yourself, then I will get back on myself.

○ Siegfried Zielinski - My passion is the an-archaeology of media and I’m also the inventor of a new field of research which I call *variantology*. Not various ontologies, but variantology, which is about the deep time relations of the arts, sciences and technologies.

□ Hi, Hello, I’m Audrey Borowski. Sadly, I have no great claim to have invented anything yet, but I’ve recently published a book on Leibniz, Leibniz and his World, and I’m a research fellow in England and I’m currently a visiting fellow at the Edinburgh Futures Institute.

★ Giovanni Leghissa. I’m philosopher, A theoretical philosopher. My passion – if I may repeat Siegfried’s expression – are phenomenology and psychoanalysis. That’s why I’m here, in a certain way, because the question of paradox has a lot to do with how I am used to treat philosophical questions within the space disclosed both by phenomenology and psychoanalysis.

/ So thank you, there’s a lot I’d like to share with you on today’s issue. many things came to my mind and connect with the work I’ve been doing over the last few years in modern and contemporary philosophy. First off, I think of the practice of philosophy itself as something paradoxical – something that crosses the boundaries and the meanings we assign to things and looks for the problematic field from which concepts take shape. More precisely, I believe that paradox has to do with the origin of meaning itself, and in this short introduction to our talk, I’ll try to show you why, from my point of view, that origin is indeed paradoxical.

The first thing that pops into my head when I think about paradox is the idea of a challenge one’s thinking. Paradox is something that invites us to review the very foundations of logic and reality. We could say that philosophically paradox is a problematic knot that challenges the laws of coherence and rationality, raising questions about how we construct meaning in the world. So in this first introduction, I’d like to focus on two 20th-century thinkers who placed paradox at the centre of their philosophical investigations: the French philosopher Gilles Deleuze and the German sociologist Niklas Luhmann.

Let us begin with Gilles Deleuze, who made paradox one of the keys to his philosophy. There’s a work by Deleuze from 1969 called *Logic of Sense*, which is entirely focused on the theme of paradox – to the point that this book presents itself in its very formal structure as a series of paradoxes. Each chapter of the book is dedicated

Audrey Borowski	□
Diego Donna	/
Giovanni Leghissa	★
Siegfried Zielinski	○

to a specific kind of paradox. Deleuze does not understand paradox as a contradiction to be resolved, but on the contrary as an element that generates thought. For Deleuze, paradox becomes the form of thinking itself. And in this very complex text, Deleuze compares a philosophical school – the Stoics – with a modern writer, Lewis Carroll, since for Deleuze both this ancient philosophers – the Stoics – and Carroll's writing gave rise, in different ways, to a theory of sense that has nothing to do with the determination of true and false. For Deleuze the meaning is, if anything, a surface effect, as he calls it, something that emerges from its opposite, namely non-sense.

Deleuze says that the Stoics distinguished two types of states: corporeal states (relating to matter) and incorporeal states (relating to surface effects or sense). For the Stoics: 1. corporeal states are related to the material and physical dimension of existence. They are the objects, bodies, substances that can be seen, touched, measured; 2. then we have “incorporeal states” which are related to the sense dimension, i.e. they are statements and meanings. So these incorporeal states do not belong to the material dimension of the body, but rather to that of sense. They are not immutable or transcendental essences, but forces that pass through bodies while not being reducible to them. And the body is the place where the tension between what is material and what is incorporeal manifests itself.

In a word, the body it is the surface involved in the creation of sense, it is the place where the difference between the corporeal and the incorporeal merge into a continuous flow of sense. And all this implies that sense is paradoxical because in every form of communication it is never given as such. To take Spinoza's theory of substance as an example, which lends itself well to the purposes of a critique of the standard theory of communication, sense is always conceived in something else, it is always modalised in something else. This also implies that meaning is always in excess of any theory that claims to formalise it. So, we have bodies and meanings, and the latter are paradoxical entities because they traverse bodies without being in them. Deleuze says that meaning is never reducible to the signified thing itself, but rather functions like a threshold.

What is a threshold? Thresholds, as the cats who hesitate to cross them well know, are very special entities. They cannot even be called entities. Thresholds are not really something, but they are what makes possible an orientation in a space. Deleuze opposes a metaphysics of substances and essences to a metaphysics or a logic of paradoxical events: the event is like a threshold that consists in an act of distinction between an inside and an outside, a distinction that cannot itself be identified. We could say that thresholds have a transcendental character, as we say in philosophy, because their virtue is to generate an experience by disappearing from the perceptual level. Indeed, our faculties, our natural faculties, our sight for instance, our faculties in their empirical use, cannot locate a threshold. The threshold is the boundary line between an inside and an outside. But the line it draws is entirely abstract or neutral.

This is why Deleuze honours the term abstract. In his lectures on Kant, Deleuze argues that “true living is absolutely abstract”. The abstract of which Deleuze speaks

is the paradox of pure becoming: we find it in *Difference and Repetition*, in the essay on Bergson – in the second volume of his writings on *Cinema*, when Deleuze thematises the so-called “image-crystal,” i.e. the image that in the films of Robert Bresson, Alain Resnais or the late Pasolini presents time immediately without passing through movement. The paradox of pure becoming is the threshold that is never where one expects it to be, always missing from its place; it is the “trauma” from which the thought that Plato evokes in the *Parmenides* emerges. Similarly, Alice, in Carroll’s novel, does not grow without simultaneously shrinking: she is a singularity that embodies the paradox of pure becoming. And it is precisely this pure becoming that, according to Deleuze, serves as the matrix of sense. Deleuze then writes, while common sense is the instance that identifies and recognises, the ‘paradox is the non-sense of lost identity.’ And it is here that Deleuzian thought enters in my view into connection with systems logic and, as I shall attempt to show, in particular with another logic based entirely on the concept of paradox, which is that of Niklas Luhmann.

In fact to the same paradox of meaning refers the logic of systems, think of the German sociologist Niklas Luhmann or the French philosopher Michel Serres, who conceive the paradox in relation to the so-called “theory of the observer.” Niklas Luhmann starts from the premise that social reality is composed of autopoietic social systems – that is, systems that self-organize through communication. The observer, in Luhmann’s framework, is a position from which the system observes itself and its interactions with the environment. The paradox arises from the fact that every observation implies a distinction (the separation between what is observed and what is not). However, every act of observation implies an internal distinction that is paradoxical since the observer can never observe “from the outside” but is always embedded within the system being observed. Thus, every observation is inherently self-referential. In Luhmann’s framework, observation is always a circular process. We could say, from this perspective, that sense is like the blind spot that functioning at the bottom of vision cannot itself be the object of vision. Similarly, George Spencer-Brown, in his work *Laws of Form*, proposes a mathematical model of distinction based on the concept of re-entry, i.e. the idea that a distinction, while separating two worlds, loops back into itself and creates a sort of circularity. Re-entry occurs since a distinction is never “outside” the system it divides but is always inclusive of the system that produces it.

Thus, for these authors, the statute of sense is paradoxical for it is missing in its place; sense is the differential or the act of distinction that generates forms – yet without possible representation. This is also what Wittgenstein meant in the *Tractatus logico-philosophicus* when he says that an image makes sense insofar as it shows a state of affairs that can be true or false (2. 221). But for something to be able to depict something else and thus have a *Bedeutung*, something identical must be given between the two states of affairs, and this identity cannot be arranged on the empirical level, but functions as a transcendental presupposition, i.e. it is the “form of the depiction”. We could also say that the encounter with something is always the encounter with the transcendental past of something on which Giovanni Leghissa also builds his idea of the “Encyclopaedia”, as the pure past or infinite sense on which all possible meanings depend.

Thus the point is not to logically resolve the paradox but, on the contrary, to step outside formal logic and declare that the origin of any form of objective knowledge is “nonsensical”. Luhmann employs the Gorgon’s myths metaphor to introduce the observer’s paradox and the possibility of resolving it – he uses the term “deparadoxization” (*Entparadoxierung*). According to the myth, Perseus’ strategy consists in not looking directly at the Gorgons – but instead reflecting their image, as Perseus does, using the mirror-like shield given to him by Athena. Similarly, the French philosopher Michel Serres introduces the strange figure of the Parasite. Who is the parasite? The parasite is a philosophical image, describing a third position between two communicating partners. The parasite is a figure that interrupts, diverts, or modifies the flow of communication. The parasite is the figure that disturbs the order, but at the same time is essential for communication because it cannot be reduced to a simple interference, but exemplifies the dynamic between the observed and the observer, between separation and inclusion. The parasite is the paradox of the excluded third, the kind of event Gilles Deleuze spoke about – one that cannot be fully identified, yet drives the entire communicative chain.

So these are the first thoughts I’d like to share with you about the nature of paradox, which, as I’ve tried to show, is not an obstacle to philosophy, but rather the ground from which thought itself emerges and which shouldn’t be “solved,” since the “meaning” of something is always preceded by “sense”, and sense as we said is always in excess, except within the framework of a limited system or a “partial encyclopaedia”, as Umberto Eco would have said. As Niklas Luhmann reminds us, philosophy’s task is not to resolve paradoxes, but to dwell within them – to grapple with the origin of communication without being petrified by the paralyzing gaze of Medusa.

○ Wasn’t Gilles’s Deleuze *Logic of Sense* written already in Confrontation with the painter Francis Bacon?

/ Not really. This marks an early stage of Deleuze’s thought, in which the engagement with Francis Bacon has not yet been thematized, but what Deleuze calls a *logic of sense* will ultimately converge into a *logic of sensation*, one that implicates the body and affects.

○ Because the title of the book which he published later on Francis Bacon, is in German *Logik der Sensation* (in French *Francis Bacon. Logique de la Sensation* (1981). That’s an examination of the concept of representation through and by means of the establishment of the aesthetic category of sensation. I know this is essay on the paradox, *Logik des Sinns/Logic of sense* (1969), but my question was more if Deleuze already was dealing with Francis Bacon, although his book on the painter came much later.

/ Diego Donna Actually, Deleuze engages with everything at once, yet in the late 1960s, his focus gravitates toward logic and the problem of meaning. Kant, De Sade, Artaud, Lewis Carroll, and the Stoics emerge as key conceptual figures at this stage.

When it comes to the concept of sense, it's kind of like a synonym for event—a strange “surface effect” that moves across the surfaces of bodies, situations, and so on. So basically, you get this kind of singularity that can't really be pinned down or objectified.

★ Is the level within which both gods and humans are put together in a certain way.

/ God as the surface of all events that occur, like a field of infinite possibilities, in a certain sense.

○ I would like to come back later in the discussion on one very important point in your presentation, and this is the idea or the concept that you cannot be at the same time inside and outside of a system. This is a classical physical, mechanical thought. But if you look at quantum physics, of course you have a completely different picture. Those philosophers and those thinkers, whom you mentioned, were a little bit late in constructing their idea of the observer, because quantum physics and quantum mechanics had been present in philosophy latest in the 20s and in the 30s. I just would like to mention a wonderful scholar, Max Bense. We talked about him quickly, a German philosopher, mathematician and scholar for informatics from the 1930s 40s, 50s. He wrote a beautiful essay 1948 on *Technical Existence*, which starts with a sentence that I have always in my mind and in my heart. I can quote it even if you wake me up in my dreams. 1948: Our existence has become basically technical. In 1948, immediately after the Second World War, this was a clear statement, and he wrote his dissertation on *Quantenmechanik und Daseinsrelativität* (Quantummechanics and the Relativity of Being). This was an attempt to integrate philosophical thinking with quantum mechanics. 1938, I think, was the date of this dissertation. It only exists, of course, in German, but you can find it in the Internet. So thank you very much, Diego.

★ If I may add something to this point, it took a really long time before the scientific community as a whole, including philosophers, could become aware of the philosophical metaphysical relevance of quantum physics. Even among the physicists who created this new frame of thought, it was not so easy to grasp and realize the innovation created by quantum physics. Niels Bohr has been the first one who asked to his colleagues Dirac, Schrödinger and others: “Look, there is something new here, but what are we really doing? We are involved in our own theory and we must take account of this fact. We must account for this state of affair, namely for our being involved in the theory we are bringing forth.”

It is interesting to point out that, more or less in the same period, Husserl tried to construct a philosophy within which the necessity to account for the position of the subject that construct the theory plays an important foundational role.

And not by chance in his lessons held at the Collège de France during the years Merleau-Ponty, a philosopher who contributed enormously to the fulfillment of Husserl's phenomenological project, showed very clearly why only phenomenology,

namely a theory acquainted with paradoxes, was able to arrange the philosophical frame for what physicists were trying to develop within their own scientific domain.

/ This allows for problematizing the position of the subject.

* Sure. And this is the reason why paradoxes are so important for us.

/ This is crucial.

* View.

O We can perhaps later discuss a little bit more about that, but I think this is very important, also for the arts. We are here at an Art Museum. I remember very well, when I started to move into what is called media arts in the 1970s and in the 1980s there was a strong change of paradigm, which is touching what you were just talking about. The change of paradigm was that you suddenly, so to speak, could be as an observer, as a visitor of a museum inside of the art piece. This was called interactive art. You were going inside of the art piece and not only that, you had the possibility to change the artwork while you were inside of it. So this was the construction of two observers, an active one which goes inside and plays with the things, becomes part of the system, and outside the distant view, the classical observer view. I'm a media archaeologist. When you go back in history, you'll find, for example, this miraculous book about Athanasius Kircher from 1645/46, *Ars Magna Lucis et Umbrae*. One of his many, many constructions was a room, a space which you entered as an observer. You were confronted with a rotating drum which was carrying pictures, behind the wall a mirror was installed. When you entered the room, at first you saw yourself in the mirror and then the drum was moving triggered by a hand outside, God's hand, the dark side of the black box. The mirror on the top was projecting images of heads, of animals, a lion's head f.e. and and so on. And suddenly your head was substituted by the head of an animal. I call the installation metaphorical machine or allegorical machine. Perhaps this is a better, pronunciation. So, this whole idea of playing with the inside and the outside observer in the arts and of course also in thinking plays an important role. I'm not so much trained as an academic philosopher as you are, but if I look, for example, on Giordano Bruno's work from 1600, I can see this also very clearly. Or natural philosophers and experimenters like Giovanni Battista della Porta from Napoli in the 16th century.

* Over no.

I discussed these kind of subjects a lot with physicists and scientists, because one of my friend is a famous chaos theoretician and a physicist, Otto Rössler. He is the inventor of what is called endophysics. This is an inner physics so to speak, the physics of the inside, the smallest things opposite to exophysics, which is usually the object of the established academic physics. He always said to me when we had discussions on quantum physics and quantum mechanics: Siegfried, if anybody tells you that he's not mad and claims to be a quantum physicist, don't believe him.

So we are very close to your ideas of the paradox, this kind of reality which quantum physics constitutes and which it constructs in relation to the observer or the observers - to be potentially at two places at the same time. This is the stuff which is of course not worrying us now anymore, but still makes us nervous. And this is great, because then we start to think. When the machines become hot, we start to think, things get more interesting.

/ What you said about art is crucial - the way the object of art becomes part of this mirroring process. Absolutely.

O Absolutely.

/ In the sense that the artistic object itself becomes an observer.

O This is one thing, and we shouldn't underestimate the epistemological values of art. I made this clear already in my introduction, with my radical decision to leave my previous *alma mater* the Technical University of Berlin around 1989 and decided to work in an art context, in the framework of art schools and art academies. Of course, there was an obvious reason because of the amount of freedom you have in such a context, especially when you can build it by yourself. I founded an art school by myself, which was dedicated to the relations of art, science and technology. So, I could do everything what I really liked. The very important thing is that I believe in artists as deep sensors, seismographs through which they may anticipate things which sometimes are articulated much later in sciences and philosophy. In my studies of media archaeology I could make a strong expertise about those outside and inside observers, going back to the early Arabic-Islamic automaton culture in the early 9th century. They were playing already with these two observers. This idea does not come from Christian or European modernity. It comes from much deeper grounds of civilization. This is an interesting point to introduce myself with another sequence. Last night I've asked Chat-GPT, for what Siegfried Zielinski is doing and it said ...

/ I guess it was pretty unlikely it could respond!

O "... that Zielinski does not see media history as a linear development of technical devices, but rather as a history of divergent forms of thought and memory. Ex-telligences - the application quoted - play a central role in this. What we cannot or do not want to keep in our heads, we store in machines..." This is just a short quote from a longer text, which is quite OK, I can do with it, we can make something out of that. For the an-archaeologist of the arts and media thinking in paradoxes is a permanent challenge. I would say that it's grounding my everyday work. Why? Because on one hand, as an an-archaeologist interested in the arts, I'm confronted with phenomena and activities of imagination, with the energy and even the power sometimes of fantasy. And on the other hand, when it comes to technical media, I'm confronted with systems of order of grammar, highly *structuralized* techno-logical systems. This is a tension which is permanently animating my thoughts and my

everyday practice. So if you work in this field as an an-archaeologist - the term, of course, constitutes also a kind of a paradox we can discuss later. You are confronted with this kind of challenges permanently. I make it a little bit more concrete, and try to formulate this tensionship between the technological and the imaginative in three or four points.

1) Neurologically, I learned from colleagues, who come from neurosciences, that the brain is constructed and works within this tension very strongly - as the tensionship between the systems of order and chaos, the systems of censorship and fantasy which tries to open up the tight borderlines of censorship. The tensionship between discipline or disciplinisation and liberation which tries to get rid of the grammatical structures of the high orders and so on. 2) Regarding aesthetics, which is strongly also my field, the organization of crossing borders in relation to conventions and aesthetical rules plays an important role for everybody who is dealing seriously with art. Creative energy means the ability to transgress the finiteness of our existence into a more open pluriverse. "Trasumanar e organizzar" ["To *transcend and organise*"] - with this beautiful formula and the evocation of a complementary harmony of diversity, Pasolini describes an essential dimension of his work as a poet and director. This formula can also be interpreted as a paradox. With a slight shift, one then writes and understands "Organizzar il trasumanar", which means: to organise the crossing of boundaries. This is apt, as is one of Pasolini's central intentions. In any case, we tried to make it our own as a constant challenge.

/ Theoretically and politically, it could be seen as an attempt to extract structures from disorder or information from chaos.

○ Something.

/ Or the reverse.

○ Yes, again. I'm not a big fan of Luhmann, I must admit.

/ No, I see.

○ 3) A third moment would be a media theoretical aspect. As I mentioned already several times, I not only introduced archaeology as a conscious alternative f.e. to Michelle Foucault's idea of an *Archaeology of Knowledge*. The prefix AN gives me more freedom. I construct an-archives which are not containers under the hegemony of power, but which follow, artistic perspectives or World views of artists. The containers of knowledge and things, which I call an-archives don't need leadership and they don't claim for power. These terms leadership and power, which are rumouring so strongly inside of the term archives, which Foucault only used in plural. In a very late lecture Michel Foucault gave in Paris, he also was thinking critically about the term archaeology by himself and introduced the idea of an an-archive or an-archaeology. He said he was not brave enough to really use it at the time when he wrote the books on his diverse Archeologies, which we all know.

Everybody would have thought that he was an anarchist, and they wouldn't have taken him serious anymore.

/ This idea of a kind of disorder, or what Foucault called in the 1960s 'heteroclite objects' that corrupt or operate from within the common perception we have of space and things, is already present in the 1966 *Archaeology*.

○ It's present, but not articulated clearly. From this point I constructed a new research field which I enjoy a lot and which is also full of paradoxes. This field is *prospective archaeology*, an archaeology which is not only looking back, which is not *retrospective*, but *prospective*. I give you an example because, again, we are here in an Art Museum and we have to be concrete. We have to talk about particularities and not only about concepts. For example, a gang of Arabian engineers, very young engineers, constructed a musical automaton around the year 850 at the House of Wisdom in Baghdad. And this automaton was already programmable. I found about this artifact after a long research and investigation, finally managed through a friend in Beirut to get hold of the manuscript of the manual, which was of course a handwritten copy in an orthodox Christian monastery in Beirut. But we were able to make it readable with the help of pattern recognition, to translate it, and to read it as a manual with which you can build the machine. That's what I did with a group of students. And this is what I call *prospective archaeology*. We read the manual and then we built this machine again, perhaps for the first time, we don't know. And the students learned what algorithmic thinking is in a deep time sense, not connected with a computer, which is a very late development. Algorithmic thinking is much older, of course. And they learned what algorithmic thinking was in the 9th century, and in a culture, the Arabic-Islamic culture, which they only knew through the contemporary news as terrorists and barbarians. This was a huge surprise. And now this object is standing in the Museum of the Ars Electronica in Linz and the ZKM in Karlsruhe, who co-financed the project, has also a copy.

So this is what I call *prospective archaeology*. I did that in several cases also with historically younger objects. You dive into deep time of history, a movement or gesture, which usually connected with the ideas and the principles of of an archaeologist. But you don't stop the movement in the past, you carry on. And then you land in the in the presence and in a possible future. This is precisely the point. It's a time machine, which I'm trying to organize with this kind of prospective archaeology. This is completely paradox. I enjoy that a lot, because it's a playful invention. I can do a lot of things with that. So that might help a little bit to make clear, why I'm so much affiliated with this subject, with this theme.

And this is another thing I really would like to mention. I'm doing this kind of research, organizing conferences, making books around this subject within a framework, which I call economy of friendship. Again, a huge paradox economy and friendship, You know, as soon as friendship becomes something economical, useful and you can use the other or whatever, you know, it's the end of of all kind of friendship.

/ That's absolutely right. Bataille profoundly challenges the notion of utility – think of his dialogue with Blanchot. Utility as the pivot of exchange...

O This is deeply wrong. Really. At least I follow. I follow here Georges Bataille and other philosophers and writers...

... who say that friendship is the common feeling of being alien in this world. This is the basic ground for our conferences and for our meetings with people from all over the world. We share this alienness within our passions of research, and this is motivation enough for colleagues from Beirut, from Tokyo, Beijing, Dehli, New York or wherever they come from to a place like Berlin or to Naples' National Library (which is one of my favorite libraries in the World) and we discuss the things we, we like to discuss. – The distance to what is realistic and the closeness to what is impossible are the closest links between friendship and the arts. Not only in the sense that the history of contemporary art would be inconceivable without the concerted energies that friendships are capable of unleashing. Groups such as the Stray Dogs or the first cyberfeminists in St. Petersburg, Acéphale, the Lettrists and Situationists in Paris, the Viennese Actionists, SPUR or the Büro für ungewöhnliche Maßnahmen in Berlin emerged as friendly complicities and lost their radiance in processes of hierarchy formation and gradual economisation. Economic rationality and poetic action repel each other like oil and water. Unless they can be brought together as luxurious waste. This implies the opposite of the compulsion to accumulate.

Friendship and the arts also join hands in an outstanding way, complementing and supporting each other in what art essentially constitutes in ethical terms. Namely in the extraordinary and dedicated endeavour to make or keep sensitive to the other, to that which is not identical to us, that which we do not or not yet understand; by aesthetic means, of course. – After half a century of experience of thinking and acting in community with others, which I have practised again and again with pleasure, I know that the paradoxical relationship between friendship and economy is not only to be endured as an unexpected, unbridgeable tension. Under the conditions of highest risk and deepest crises, an economy of friendship turns out to be the only reliable basis for lavish poetic production. Provided it does not exploit and does not create new power structures.

One of the most prominent is Nam June Paik, the so-called father of video art, which is a silly expression, but he said a wonderful sentence in an interview. I study technology in order to be able to hate it better (or to criticize it better). That's a beautiful paradox construction. And perhaps it's not even paradox. It's just following a different logic, the logic of the particularities, of the things, of objects, which I appreciate a lot. You are not only looking at them but you go deep inside of them. I wrote my dissertation on the history of video recording. I wanted to go as deep as possible into this artifact, into this technical system to really find out what it is not only technically but also culturally, philosophical: an audio-visual time machine. But that's a long story. So this is Paik. You can find a lot of paradoxes in his work, *Moon Was the First TV* and all these kinds of things.

But you can also discuss or study the work of the artist Panamarenko. He is one of the artists who works in the tradition of the bachelor machines, *Machine Célibataire* in French. The bachelor machines, the invention all kinds of precise functioning things, but which are not useful. This is beautiful. It follows the ideas of Alfred Jarry and the 'Pataphysicists of the late 1910s and 1920's. 'Pataphysics are, of course, a paradox. In media arts, you can find a lot of these kind of inventors and crazy engineers, who are working with such things. Perhaps I wrote that down, because I have to be very precise in this case. One of the most well known apparatus which you can call a paradoxical machine is Marvin Minsky's Leave Me Alone Box. In 1952, Minsky was a doctoral student at Bell Labs and through him Claude Shannon came into the game. In their conversations the mathematician and communication scientist Shannon came up with the idea of a completely useless machine. The apparatus fascinated him so much that he adapted the idea and built it as a model for his own philosophical and poetological pleasure - only for himself. (So, it was also a bachelor machine.) He did not do that for exposure and to show it to others. It represents the briefest and at the same time most ironic technical objectification of the two machine states ON and OFF. Please, have in mind - we are long before there was any theory of digitality or something like that. How does it work? A metal toggle switch is mounted on the surface of a small wooden box which can be set to either the ON or the OFF position. If I intervene in the idle resting position (OFF) by flipping the switch to the ON position, a lid embedded in the surface of the box opens automatically, a small metal hand pushes out of the hollow space and flips the switch back to the OFF position. The lid closes again as a result of this movement. The all-purpose nature of digital computers (John von Neumann), is poetically alienated. The only purpose the machine pursues is to turn itself off when it is activated.

This is a beautiful example for permanent paradoxes. When you are moving through advanced technologies, you leave the two separated realms of the material things and the metaphysical. They are both very closely intertwined and they become something through which you have to go as a passenger permanently. My friend Peter Weibel - former director of the ZKM Karlsruhe, with whom I worked a lot and made some exhibitions including Claude Shannon's piece - made a beautiful performance in 1967. This was extremely early. Like Shannon with his box he played in the same way with an audio tape recorder. He was sitting in the streets of Vienna with a normal audio tape recorder. And he pressed the one button of the recorder and said ON. And then the recorder answered OFF, and he said ON again and the recorder answered OFF again. Weibel did that for hours and hours. He was favourite with Jacques Lacan's psychoanalysis at that time, so he started his performance with an introduction to Lacan and his thinking. Weibel said, I'm doing this as long as the machine or myself do not collapse. And again, this was a kind of an anticipation of a theory of digitality, which did not exist at that time in 1967. It was an artist's statement and an artistic anticipation. So basta? I don't say anymore.

/ This idea of the mind as a black box—a sort of metaphor—is close to how Lacan talks about the unconscious, at a time when Lacan himself was very interested

in and attracted to cybernetics during the 1960s, attempting to mathematize the unconscious.

□ ... Shared metaphors, you know, to talk about the brain, the mind and the computers and the various networks from which many paradoxes, since we don't have the appropriate tools to talk about digitality, computing and so on, probably emerge.

○ I agree.

□ After a more philosophical and artistic foray, I will maybe delve a bit more deeply into more concrete paradoxes touching to AI as I see them. Maybe just a few points which I think might be interesting for us to meditate on and which will help us precisely gain a more transcendent view on the systems in which we are immersed on a daily basis, which I think is a huge problem these days.

I mean, first of all, we are building systems that we don't comprehend. This is not a original point - it's been mentioned by many thinkers such as Gunther Anders and Hans Blumenberg. We are using on a daily basis systems, mechanisms that are obfuscated. We've just mentioned the black box. Are these systems intelligent? It turns out actually that today the Turing test, whereby a machine could be deemed intelligent if it managed to simulate human intelligence, seems to have been debunked by ChatGPT and various other systems.

Are we really dealing with intelligence here? We're in a situation now where we have bots pretending to be humans and humans having to behave like automata and increasingly in some cases like bots pretending to be human which could be deemed as the summum of paradoxes. ChatGPT, far from manifesting a machinic consciousness, actually peddles simulacrum and mimicry with little regard for truth, actual intelligence, or judgement. So we rely on these systems that actually end up flattening our horizons of meaning, organize our cognitive deskilling and, in the words of Bernard Stiegler, have succeeded in bypassing the deliberative functions of the mind.

Another significant paradox of today concerns excess - it is a keyword in fact. And Diego, you were talking about thresholds and excess. We live in an ecosystem of data overload and overabundance. This overabundance of data has long been sold to us as helping clarify the world, gain more knowledge and mastery over it, and achieve more progress - this great narrative has actually not led to better informed judgments or a deeper understanding of the world, but has had the opposite effect.

We are overwhelmed. It has rendered the production of truth challenging, if not paradoxically, actually irrelevant on many levels. This deluge of data, a consequence of the ubiquitous deployment of digital systems meant to comfort our mastery over the world, has in fact deepened our current epistemological crisis.

And here I'm thinking of the artist Hito Steyerl who writes that under the new regime of big data, veracity is no longer produced by verified facts. So too much

data kills data. Not to mention that in our current regime of daily infinite streams of data, categories, taxonomies, various systems of ordering - we mentioned Bacon earlier on from the early modern period - have been erased and all information content is levelled.

So in words famously uttered by Mark Zuckerberg, you know, a tsunami is as important as a video of a squirrel on Facebook. So we live in a bizarre, some might say, distorted reality.

Data, information, facts pale in comparison to ideas, values, frames, ideologies in increasingly and highly disorienting and uncertain times. On top of that, the more technologies of communication we dispose of, the lonelier and more isolated we feel. This surfeit of information seems also to be fostering, as we know, social divisions, distrust, conspiracy theories, post factual politics, while reducing our agency in the world and preventing us from coming together and forging shared meaningful worlds.

The kind of rationality that is operating in many of these systems and especially machine learning systems - I'm thinking here of Chris Anderson's famous 2008 provocation - these systems infer correlations rather than causal links from past data sets, they speculate, and I've argued that, actually, many of these systems bear striking similarities to mythic thought. We've had a big return of mythical forms of thinking. In fact, today's technological algorithmic world has in many respects ushered in a new form of 'absolutism' - and here I refer obliquely to Hans Blumenberg - that threatens to form new totalizing images and forms of thinking in a bid to tame the future and avoid the unpredictable.

And at the conference, we mentioned the crisis of expertise and talked about governance and the fact that experts are never allowed to simply state that they do not know. There is a fear of uncertainty.

There is no tolerance for uncertainty, you know, and this is a big part of the equation here, compounded to the mythical nature of how these algorithms operate, generally drawing on past data. And we are led to another paradox which consists in the return of myth and gnosis, namely the idea that a true reality lurks beneath the material reality. Knowledge does not pre-exist masses of data, but continuously emerges from it.

I think Antoinette Rouvoy says that reality is always there, imminent to the databases, waiting to be discovered by algorithmic processes. So over the past few years, these systems have crossed a threshold as they have been hailed as uniquely competent, especially compared to humans, at revealing truths hidden within the data. And here we can quickly see the more metaphysical dimension of all of this impulse. In fact, it's part of a broader narrative which sees humans as these flawed, horrible creatures who should be ashamed to have been born in the words of Gunther Anders. We are encouraged to defer decision making to algorithmic systems and their supposedly more efficient management of our lives on the

misconception that they will help steer the course of our lives in more 'optimized' and 'rationalized' ways, whatever that means – which is another paradox. These terms are never really defined, especially if they happen to align with our individual worldviews. These tools crossover to shaping reality itself through preemption. They are no longer descriptive, but prescriptive, helping generate and enforce particular futures upon the world from past data. So you know, we are entering, in many respects, a weird doppelganger word. I'm thinking here of Naomi Klein and her excellent book. You know, a warped vision. We have reality and then these various mirror perceptions of it. How do all of these versions and perspectives of reality fit in together? And how can we transcend our various perspectives to reach a new consensus? That is the question I am currently working on.

So our rapport to the world is increasingly powerfully mediated by various interfaces and frames that we select or are selected for us. Hannah Arendt talks about the logic of an idea. Crucially, they drive the current epistemological and political crisis. They constitute the perfect mechanism through which ideas and worldviews are transmuted into social facts. These famous filter bubbles and echo chambers in which we live breed simultaneously dogmatism and relativism – yet another paradox.

Here, especially in a context of socio-economical, political and cultural crisis and what is perceived as the loss of meaningful worlds, we are promised individualized results while these systems actually increasingly peddle standardized visions of the world and ways of life and homogenize its contents. We are also provided with the illusion of agency, while our public realms are depoliticized and we are further atomized and isolated. Social platforms in particular are particularly good at encouraging a mentality of outrage that loops on itself indefinitely. Expressivity and volubility on social networks seem to be uniquely matched by our inaction in the real world social technologies. We were sold the idea for a long time up up till recently from the 18th century onwards that more communication including social technologies, letter writing, telegraphs, newspapers and so on would help promote tolerance, bring people together, promote peace and democracy. And we can trace this idea in fact to Leibniz but as Fred Turner and Nicholas Carr have once again shown, this does not follow at all. And we are actually in the paradoxical situation where these new social technologies have in fact produced the very opposite.

Another huge paradox concerns the environmental aspect. In spite of operating in a virtual space, AI, the 'cloud' has considerable tangible effects. AI isn't really virtual. The abstractness or disembodiedness of the cloud is an illusion that conceals a deeply material structure. I'm thinking minerals, resources, exploitation, huge energy consumption from production, transport operations and so on. Not to mention that AI is increasingly facing an energy crisis considering the exponential energy demands. We are in fact touching on to an absurd situation here where because of data centres, certain villages and certain cities in the world are being deprived of water because the water has to be funnelled over to to cool down data centres.

○ It was a big discussion when Tesla founded his car factory in Berlin. There were a lot of protests against it, because the electronic car production is using an enormous amount of water every day.

□ Absolutely, and each time you enter a prompt in ChatGPT in fact it's half a bottle of water that is used up. And so we also willing to sacrifice the earth and the very material to the virtual. Diego talked about the tension, and I was really thinking about AI then and its opposition of material v. immaterial. AI is the perfect case study for that. We're willing to sacrifice the earth for grand fantasies and still largely empty promises. We are incinerating the earth in the name of a higher intelligence, a form of digital God. This is a major problematic at the moment: how we cleave on to new forms of abstractions, new ideals of AI as opposed to reality. We are sacrificing the world in its materiality in the name of hypothetical, immaterial visions and overall helping perpetuate a pernicious way of life. Another paradox is that the algorithmization of societies have led us to fluid, frictionless realities with everything potentially at our fingertips. And yet we are more unhappy, lonely, discontented than ever before. We are also told every day, in fact, that we are living in a momentous historical time of radical change. But are we really experiencing such a revolution and such radical changes or are we really more mired into a constant crisis that fails to find a solution, a critique, a new transcendent vision? Algorithms, algorithmic systems drive these crises even as they present themselves as convenient and easy solutions to them. They help preserve a pernicious status quo and state of uncertainty, calling for always more technology to the remedy ills they help exacerbate. And actually, they afford very little genuine resilience at a time when we are told by society that we are living in times of chaos, uncertainty and precarity. So, we are mired further in what has become a continuous crisis, a speculative bubble. Digital systems and structures not only occur against a background of deepening political, epistemological, economical and social crisis, they actually compound and drive it. We are in this giant paradox within a rhetoric of constant change. Little actually arguably really changes. We are racing to nowhere in a movement without end or purpose in the name of empty promises and grand fantasies which vie primarily for the preservation of the status quo, generates only variations of itself and ultimately just incurs more crisis. The ensuring paralysis further comforts us in our powerlessness in action and our need, our reliance on those very systems. So, you know, we are effectively supporting and heightening the current neoliberal momentum which continues to exploit large swathes of mankind and devastates the planet. And finally, you know, these systems are actually in a way leading us to our doom because they encourage us to continue in the current direction. They are simply driving us headlong towards catastrophe in the name of erecting a hypothetical future world order in which we are rid of humans and their horrible flaws. And we have to wonder, to meditate on what seems to be a nihilistic impulse behind this strain, this particular kind of AI that has been imposed on us.

/ Thank you Audrey! There are lots of questions, but maybe, Giovanni, you'd like to add something?

★ OK, well there is not so much left to be said.

○ Oh

★ There's a lot. No, no.

○ Coquette remark.

★ No, no, no. Let me come back to Niklas Luhmann. I'd like to explain why it is so important for me as a philosopher to take into consideration his way of dealing with paradoxes. And in the end, I'll try to explain why paradoxes are necessary for constructing a good theory. In this context it seems to me that it is possible to show as well that the question of paradoxes is related to the question of utopia – or, better, to the question of how to let arise a community of people who share the idea that paradoxes are not a mistake that we should prevent to occur. Previously we were talking about a sort of hidden community, unpolitical on the one hand, and paradoxically very political on the other hand. A sort of community of people who share the idea that paradoxes are important for good life, for the welfare of mankind in a certain way. But let me repeat, first of all, what Diego already told us about Luhmann's theory concerning paradoxes. There is no logic of paradoxes. This is the first point.

I mean, that's the point. If you want to construct a logic of paradoxes, the first thing you have to deal with, the first thing you have to acknowledge is that logic, what we usually mean with logic, is a way of avoiding paradoxes. Logic has been created precisely in order to deny the existence of paradoxes, or at least to make them un-harmful. Starting from a totally different perspective, Luhmann says that paradox is unavoidable, and, moreover, he tries to explain us why a good theory must be based precisely on paradoxes. But when and why paradoxes arise? The answer is very simple in a certain way, and in this sense very logical, if you want. Paradox has to do with the fact that an observer cannot observe himself/herself/itself. (I say "itself" with reference to the fact that we are now dealing with systems that pretended to be intelligent, at least that are perceived as if they were intelligent). An observer cannot observe himself/herself/itself means that he/she/it can only see what he, she, it sees. But he, she, it cannot see himself itself herself seeing what he, she, it sees. What remain unseen by an observer, by any kind of observer, is precisely the unity made up with the observer and the observed world. This unity can be observed only by a second order observer – whereas it must be immediately added that there is no third order observer. The second order observer who observes the first order observer is not able to observe himself/herself/itself. He/she/it can be observed only by another second order observer who takes into consideration what observes the first. What comes into existence here is a field within which the second order observer who observes a first order observer becomes observable.

/ This is why the medievals needed God! The unobserved observer.

★ Yes, sure. And this is why Luhmann was so fond of Nikolaus of Kues' philosophy.

Even if the latter was a Theologian, and even if theology has nothing to do with modernity, Nikolaus von Kues gave birth to a theory within which it became possible for the first time to reflect upon the paradoxical way in which the process of reflection takes place. This point invites me to make a cross reference to Blumenberg, an author whose philosophy is strictly related to Luhmann's system theory. Both authors can really help us understand why modernity implies a *coupure*, a real interruption and a break with regard to what came before. Modernity, if meant as a cultural tradition, or as a sort of tribe that can be studied by cultural anthropologists, can be seen as the first tribe made of people who share the idea that there is no god, no superior entity able to give sense to the existence of the world. This means that modernity puts an end the idea that there is an observer which is posed externally to the system within which any observer can operate. That's the point. So there is no god as a third observer. If there were a god, or a goddess, he or she would be third order observer. But there is no third order observer. This is a crucial point I think.

○ "God does not throw dice". This is a quote by Albert Einstein.

★ It's interesting to observe from the external point of view of philosophy that Einstein was not so fond of quantum physics. He was not ready to. He was not willing.

○ Working on the on the he was.

★ Not willing to understand the metaphysical implications of quantum physics in this sense he remained a scientist of the 19th century in a certain way; more precisely: he believed that the physical laws have their own existence independently from any observer. The point is that if you agree with what comes from quantum physics, you discover laws but your presence as an observer is necessary in order to say there is a physical law. And this is the point. Whereas Einstein disagreed with his colleagues, colleagues who created, who brought about what we call now quantum physics. But anyway, I come back to Luhmann. So there is no third order observers, there are only systems within which you have first and second order observers. This fact implies the fact that any system composed of first and second order observers can observe itself thanks to the interplay of them. The possibility of a second order observer makes it possible for a system to practice a sort of self reflection. But this self-reflection does not imply any form of externality. It still remain within the system. The function of any second order observer is that the existence, the presence, I would say the performativity of a second order observer allows for any process of self-reflection within the system.

When Luhmann speaks of system, of course, the system he has in mind is modernity, as I said previously, which is the system within which all of us are compelled, in a certain way, to work. (Perhaps, in order to get out of modernity, we could decide to join the people who live in the Andaman Islands, but I'm not so sure that they want to share their life with us). Anyway, what a second observer sees is the paradox implied in any act of observation, in any operation of observation. This first order observer doesn't see the difference between him/her/itself because this difference is

always implied by any act of observation. To observe whatever you want implies that you create, so to say, the difference between you and what you are observing. And so you cannot manage this difference because you work within it. You always presupposes this difference. There is no way out. According to Luhmann, in the realm of what we call observation as sociologists, as artists, as philosophers, the only thing we can do is to observe the existence of paradoxes. Further, we can observe the way in which any system, any given system, works with paradoxes and thanks to paradoxes. How does any system manage its own paradoxes? Through recursivity. Recursivity means to unfold the paradoxes along time. But perhaps I'd better say "to deploy paradoxes". You know, it's a term that has to do with warfare. If you study geopolitics, strategy, things like that, in that case you have the opportunity to see forms of thought within which the necessity to deal with paradoxes is present since the beginning. Within a war, you do not know what the other is doing or is going to do. And you and your enemy are both within the same system, which is the world system meant as the theater of any possible war.

So which are the consequences we can draw from this? In a philosophical perspective, the first consequence is that there is no foundation in the sense of a *Letztbegründung*. The philosophical project of a *Letztbegründung* implied the possibility to ground both the existence of the word and the existence of a set of true statements concerning the word. This was the sense of such an undertaking, which characterized the whole of classical philosophy, but this old form of grounding is not to be held as defensible anymore. It is not something we can dream of anymore. (Of course, there is a lot of colleagues within the academia that still continue to dream of this possibility of a *Letztbegründung* because this is the way in which they can justify their existence within the academia itself, but this is another question).

/ Possible. It's possible.

★ Within the encyclopedia there are some strange people. Some crazy people are crazy in the clinical sense of the term. I mean that because here you have a form of paranoia. And Lacan wrote wonderful things about this connection between the dream of a *Letztbegründung* and the paranoid psychic attitude. No, there is still a lot of colleagues who keep on dreaming of the possibility of a ultimate foundation of the world, of the, of reality in general, of the totality of what there is. But this is not possible anymore. Nevertheless, instead of complaining the loss of a world whose intelligibility is grounded in an absolute subject, we should enjoy the fact that we are lost in the processes of foundation. That's the point. We are lost in the necessity to ground anything without arriving at any ultimate ground.

□ The new ground.

★ To deliver grounds in order to justify the existence of knowledge means to put the following question: why do we need knowledge? Why do we need true statements concerning the world? If the answer has to do – as I would suggest – with the evolutionary history of our species, then we have to recognize the fact that we are

involved in the uninterrupted processes of foundation. But this means that the foundation itself is something contingent. You cannot arrive at an absolute foundation. This means that the transcendental perspective can be maintained only as a contingent self-positioning of the subject that is supposed to establish the conditions of possibility of knowledge.

Let me add that this is very coherent with both Luhmann's system theory and Husserl's phenomenology. Even if there are not so much references to Husserl in Luhmann's work, Luhmann has always stated that Husserl was the most important author for him. Of course, many other authors are important for Luhmann – second order cybernetics (von Foerster and Ross Ashby), the theory of organizations (Herbert Simon and James March), sociologists like Talcott Parson and Max Weber. But the only really important philosophical reference for Luhmann was Edmund Husserl's phenomenology.

This should not sound too strange. Read through the lenses of Luhmann's system theory phenomenology itself acquires a new feature. Sure, phenomenology comes before Luhmann's system theory, but if we put them together, not chronologically, but starting from a theoretical point of view, we can better understand why the transcendental question, the old transcendental question, is still important for us. Why it is important for us? Because the transcendental stance compels the philosopher to say what he or she is doing while doing it. The transcendental question, if reframed within Luhmann's system theory, becomes the question of the self-positioning of the subject that construct a theory – any kind of theory: consider for example the issues post-colonial and gender studies deal with. We should not forget that all what we are doing now in the present era, where we are so eager to transform our academic practice into something politically relevant, is strictly related to the necessity to account for the self-positioning of the subject. And precisely here we meet the point where paradoxes arise. The subject, while reflecting upon its act of reflection, comes to a blind spot, namely to the impossibility of a complete account of its own operation of reflection. Husserl has been the first who discovered, so to say, the fact that this blind spot is unavoidable. He was unhappy with this discovery, but, nevertheless, he did not look away from it. He was honest enough in order to make place for this, namely for the paradoxical structure of the phenomenological discourse.

Beside this methodological aspect of the paradoxes that are involved in the construction of a discourse aimed at articulating a reflection upon reality, there is another aspect that I would like to hint at. I refer here to the existential – if not religious – meaning of system theory. You can take the the main books of Luhmann and read them as if they were guides to a better life. What you can learn by reading Luhmann is the fact that you are contingent. Your position as an observer is one position among many others – included the position that perhaps one day will be taken by thinking machines (there are no thinking machines now, but in case they come into existence, they will be observers like us, within the same system that encompasses all the possible forms of observers). In this sense, to perceive oneself as an

observer among others means to get acquainted with one's own contingency, with what Freud called *Vergänglichkeit*. Very trivially, it is the fact that we must die. This fact, this brute fact is implied in this idea that you are an observer among others.

The last point – then I come to the conclusion – is related to how Luhmann's thought can help consider the notion of encyclopedia in a new way. The encyclopedia you meant before, the system within which we all live as human beings now coincides with the sub-system of modernity. This sub-system within which we all live as a theorist, as people who write books, who give conferences, who practice theory, is the encyclopedia. In this sense, the encyclopedia acquires a transcendental meaning. But, as I said before, to define it transcendental does mean that it comes from the outside. We are within this system and we all work, we all contribute to build it up in a certain way. So the encyclopedia itself becomes something contingent. This means that we can recognize the historicity of every form of knowledge, which is a very important point with huge political consequences. By recognizing the historicity of truth itself, of the concept of truth, we can practice the recursivity I was talking about previously. Of course we are supposed to state true sentences. It would be a performative contradiction to say that what I'm saying is not true. We assume that truthfulness of our theories, of our speech, and so on.

But this is a contingent act within the shared encyclopedia. And so in this sense, the encyclopedia becomes the political place within which it is possible to imagine new words by recognizing at the same time that this act is a small act. The most important revolutionary things, the most important innovations, the most important upheavals within the political system takes place outside the academia, outside any universal institution. Of course, we must be aware, I think, of the fact that our innovations have a very, have a very small range. But at the same time, we want to give our small contribution to the imagination of new worlds or new forms of friendship and coexistence among human beings. But the most important thing is that we recognize the contingent character of these small acts.

/ Thank you, Giovanni. Obviously there is no possibility for philosophy to think itself as an act of foundation, as you said, at least in the traditional metaphysical sense. And I agree with the fact that system, system theory can be usefully managed, used as a mean to disengage phenomenology from its last metaphysical feature, which is a science of the cogito in the end, which means, which also implies that the foundation itself as a political place, it's the encyclopedia, you know, itself that becomes contingent. And in my view, D'Alembert and Diderot were perfectly aware of it.

○ Did I misunderstand? The encyclopedia is the training ground for human intelligence? Yes?

★ Yes, an encyclopedia encompasses both human beings and artifacts.

/ That's it, but in a paradoxical sense indeed.

○ This juxtaposition might make sense. The encyclopedia as the training ground for human intelligence, the opposite to the training grounds through which Chat-GPT and all the other applications are going through.

★ If viewed like that, the Encyclopedia is the first form of Cyborg.

○ Yep, exactly Cyborg. That OK now of human intelligence?

★ And shared mental models whose form is not only immaterial, is material as well.

○ I just.

★ But I'm not saying that because I share the idea of what now is called extended cognition. I would say that.

○ Katherine Hayles...

★ Cognition is embedded in broader contexts, and one of them is the encyclopedia; for us the latter is the most important one, I think. But for people who live outside the academia, for people who are not engaged in theory or things like that, the common sense is the first form of shared mental models transmitted from generation to generations and so on.

/ The Encyclopedia is as a sort of "externalization" of memory, yes, as you said.

★ One of the many forms of it.

□ What's very interesting is that the concept of Encyclopedia has actually existed since the early modern period. And yet there is this tension that is never really resolved, even with people like Leibniz. You know, he has this idea of a perfect language and a general science which would record everything, but always in a very static manner. And the question of contingency in the face of this ideal of an absolute is always badly negotiated by Leibniz and his fellow philosophers. They can never overcome the tension between the contingent, the contingency of the world, and this ideal of a beautiful Encyclopedia which would encompass everything.

But I wanted also to mention the fact that everything you've mentioned is actually very much reflected in the thought of Hans Blumenberg especially regarding observation. I mean by this, and something I've I've noted in my own work about him too, the constant interplay between inside and outside and the self being able to move in between, and he's very unique on that level, being able to take the moment to distance oneself whilst being immersed in the framework, whilst at the same time being aware that it is merely a contingent framework which will evolve over time. And that's obviously not so easy for many people to navigate that, including the awareness and the recognition that truths and our grounding itself are contingent and evolve over time.

○ I thought.

But on the other hand, I just would like to ask the question. Or perhaps the question is paradox already if we cannot try to think that this third order of observation is possible not through our biological existence, but through machines, through models. This is what simulations are able to do. They can, they can simulate, they can play the role of the third observer and of course modelling the second and the first observer. This is possible. And the reason why I asked this question is to put in more the experimental and perhaps the playful side, the side of the impossible into the game. Because there are possibilities for artists and intellectuals to work on this kind of impossibilities. I'm sorry, I'm stuttering a little bit. But we can have a long discussion about Niklas Luhmann. I never understood why Luhmann is so famous in other countries. In German media and communication studies he does not have a strong position. And one reason is that already quite early in the 1970s, some of the historians of sciences made absolutely clear that this was not a system theory that he tried to develop. This is something different. System theory, which is a mathematical sub discipline is not what what Luhmann is doing. He realized a sociological adaptation of a system theory, but you can't call this system theory anymore, because it's not consistent and so on. I studied at the Technical University, where this critique was common.

/ Luhmann's account of the concept of system clearly goes well beyond its mathematical or technical formalization.

○ Yeah, of course, of course, even.

★ From a mathematical point of view.

○ Point exactly, yes. I'm just telling you, because this discussion took place in the 1970s. Blumenberg is, of course, a very fascinating thinker regarding technique: *Selbstbehauptung*, *Selbstermächtigung* - These are very important concepts, but they are also limited and not highly original. For me they are familiar from Ernst Kapp and his *Basic Outlines Towards a Philosophy of Technique* (1877). And again, I would like to come back to this idea of a playful and experimental relation with technology with Blumenberg's concepts. You can't address this this this other possibilities or also impossibilities in everyday life to to play, to challenge the systems and do something quite different with them, not expected, ambiguous and so on and so on.

□ I would disagree with that.

★ Let me play for a moment the role of the ontologist (what I am not: as a phenomenologist, I'm used rather to move myself in the interplay between ontology and epistemology. In this interplay between ontology and epistemology one can better put in evidence the continuous self-questioning of the subject which is responsible for the constitution of an ontology). But let me play for a moment the role of the ontologist. All the machines we are talking about depends on an algorithm.

And the algorithm is the creation of a human mind. So the possibility that a machine becomes a third order observer is excluded. The machine we are talking about is simply another second order observer.

□ But machines are now writing their own algorithms and their own codes. And that's praised as the way forward in fact, to the criticism of people like Gary Marcus quite famously and very recently.

★ but here we still have to do with human interactions, those human interactions that we need in order to create new worlds, to imagine new worlds, and so on. So the ontological basis remains the same.

/ Yes, but at an operational level, there is a margin – a kind of relative autonomy – of the machine itself, precisely in its ability to calculate and combine.

□ Yes. Can I come back quickly to the point about Hans Blumenberg. He wrote a few essays on the technical question, which are limited and I agree with you on that. However, he wrote a beautiful, incredible text on the aesthetic where he refers back to the text of Paul Valéry which talks about finding that a strange object on the beach. And this is an incredible text because this is a celebration of variety, ambiguity, of the object that we cannot identify. And I find actually that Blumenberg, even though on some questions he may seem a bit narrow, is actually the thinker of nuance and and circuitousness and ambiguity. And actually I think that this is why people like him. And I saw that when I was working on figures like Luhmann, Leibniz, Blumenberg who all fail to fit in neatly into categories. People do not like that. It's very unsettling for them. They are those who challenge the thresholds, those who challenge the categories.

○ I agree with that.

★ That's why there's a reason why it is not so. You have no pay off. It is so dangerous for you as a member of the academia. If you deal with these authors, the colleagues come to us and say you are not a true philosopher.

/ Yes, obviously.

★ Because you write books about.

□ We talked about paradox from the perspective of the observer but I work on the paradox from the question of logic actually. And this is what's been happening, and we didn't mention Bertrand Russell a lot of the problem and what I'm working on currently bears in a way on the 'exhaustion' of logic. These extremely logical models have been degenerating into these crazy ideological machines.

○ I would question no, but, but, but let me, let me just just just one, one little reaction because there there is a slight misunderstanding. I, I admire Blumenberg a lot.

My point was – I definitely did not articulate that very well – that his idea of *Selbstbehauptung* and *Selbstvergewisserung* through technique is a limited epistemic figure. There are a lot of other things in his writings which I like a lot and you describe this perfectly. But this idea of *Selbstermächtigung* is close to the biggest fear of those people who are do not really dealing intensively with artificial extel- ligences, but write and speak about it. And this is the fear of the *Selbstermächtigung* of the machines, the eschatological figure of, of what you can call in English *technological singularity*. Diego yesterday addressed the whole very complex theme of subjectivity. We have urgently to find new ideas on subjectivity which are not sticking to the limitations of European modernity, but which are much more open. And then although these kind of fears of the *Selbst* and of the machine can be dissolved. This is my opinion.

★ Not my point, because I think that every possible form, every new attempt to create a new form of subjectivity, a new feature for what we mean with the concept of subjectivity is another form of self-fashioning.

○ Yeah, that's a very, very European thought. I'm sorry. Now that's that's a very European thought.

★ No, no, I consider it from a Buddhistic or a Taoistic perspective.

/ Yes, also because self-reference – or self-distinction – can be understood, in a Luhmannian sense, as the very act of distinction itself. It's not about the fixed position of the subject, but rather about the act of distinguishing: tracing the line between inside and outside. This position coincides with the difference – indeed, the differential – produced by the act of distinction itself. But I completely agree with you, Siegfried: we need to look for something that escapes metaphysics— something that is neither the metaphysics of the cogito nor that of the object or ontology, but rather something in between. That's why I think Spinoza is truly important for us.

○ In my thoughts, I'm always close to artists and the chaos theoretician and physicists. I was talking about Otto Roessler. He has a wonderful expression when he talks about the *cogito*. He says, 'cogito therefore I sum'. That's of course the expression of a passionate quantum physicist and, why not? Why not summing more? There are so many possibilities of summing and summing does not mean that that we are silly or that we are turning nuts or something like that. I'm interested in this summing and its impossibilities.

★ Then let me shortly explain how I tried to to introduce these subjects within the academia in a in a way that I consider, perhaps mistakenly, artistic. I read Nagarjuna. I've been reading Nagarjuna the whole time, but being impossible to give lectures on Nagarjuna because then you are asked: do you know Sanskrit? No, sorry, I do not. I cannot read in Sanskrit. Then I give lectures on Husserl where I find the same results, the same philosophical outcomes. There is no ego. There

are only intersubjective interactions. There are only observing systems among which we find ourselves, in the sense we can occupy different positions as observers in different moments of time.

/ I'd say that Luhman is a bit more radical.

* I'm not so sure. If you take the lessons on the internal time-consciousness, you see that for Husserl there are only processes. I wonder why we always quote only Whitehead when we talk about the ontology of process. But the first form of ontology of process is to be found in phenomenology.

□ And the conditions of possibility for new forms of discourses including in AI and so on, you know?

* Institutions are a form of constraint.

/ Absolutely – they are conservative in nature, whereas you can see how the Spinozist, paradoxical notion of the subject is put into practice. That is, the idea that the Substance is always modalized into something else – that it is difference, the very process of differentiation. And you express that in a very concrete way. So thank you for being here and for taking part in this session of the “Clandestine Talk”.

○ It was a pleasure.

/ I'll take with me the image of Claude Shannon's “Leave Me Alone Box” – a beautiful device, as it perfectly exemplifies the paradoxical, autopoietic nature of communication, which ultimately proves to be “useless”.

* As you said, indeed.

○ But it's beautiful. It's a thought machine, yeah.