

Gilles Deleuze

On Cinema, Truth and Time: The Falsifier, 1983-1984

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Transcription: La Voix de Deleuze, Rudy Pascarella (Part 1), Catherine Gien Duthey (Part 2), unattributed (Part 3); additional revisions to transcription and time stamp, Charles J. Stivale

Translation: Graeme Thomson & Silvia Maglioni

Part 1

Our problem, you will recall, is this: if we take an actual image that is cut off from its sensory-motor linkages, that is to say a situation that is no longer sensory-motor but which is a pure optical or sound situation, pure optical or sound... someone finds themselves in an optical-sound situation to which they no longer react – either because they have no desire to react or because they can no longer react – when an actual image is cut off from its motor extension or extensions, it is no longer linked to other actuals. So, our problem is: What is it that happens here exactly?

It must form a circuit. But with what? Either it will remain alone, in which case we'll be done with it, or it will somehow function, though its functioning will no longer be of the linkage type, since actual links with actual. We will call this linkage of actuals a *connection*, a *sensory-motor connection*. When an actual image is cut off from its motor extensions, either there is no longer a linkage, or there is nothing at all, and it remains suspended in the void, or else – and this would be very different from a linkage, we'll see why later on – it will enter into... it will form a circuit. A circuit with what? Not with actual images. So we are left with no choice. We can say that our hypothesis is that, in this case, an actual image will form a circuit with something virtual, with a virtual image. Instead of a sequence of actual images that are linked together, we will have a *coalescence*, a *consolidate* of actual images and virtual images.

So, this is what our question was. Our question was: *what is this virtual element?* What is a virtual image? And that was the point we had got to: an actual image that is no longer linked, or that is for one reason or another cut off from its sensory-motor extensions, in such a way that there is no longer an actant, a character who acts, and there is only – but here "only" means something much more – namely that there is finally no longer an actant but a *seer*. Well, such a situation... this kind of pure optical-sound situation, distinguished from a sensory-motor situation, is what we called a *description*. So, let me start again: what does a description in terms of an actual image relate to? It is no longer linked with other actuals, it forms a circuit with one or more virtual images.

That's how we began to consider this idea of the virtual image, the coalescence of actual images and virtual images... but what does this mean exactly? So, we passed from one hypothesis to another, and last time we said – and this point, we must be very clear on this, otherwise all is lost, otherwise I'll have to start all over again. If it is not clear, as it is clear in my head, it does not mean... You understand, there are things in what I say that are not clear for me, but which are perfectly clear for you, bizarrely enough. But on the other hand, things that are very clear for me are not necessarily so for you. So, I am ready to go back, it's important that we don't have any more problems regarding this point, so that you are... if you're not interested in my question, it's... So, I suppose that all this is quite clear, you don't have any questions, there's no problem? Good.

Our first hypothesis was this... well, it's quite simple: a description, that is to say a situation cut off from its motor extensions, would form a circuit with recollection-images; it is these recollection-images that would constitute the virtual image we are looking for. There would be a coalescence between an actual description and recollection-images. Fine. We have already seen this, now we should go on... In Plato's dialogues too, we have a succession of hypotheses. Bear in mind that we cannot eliminate these. From each hypothesis, there will be some little thing we want to retain but that cannot be valid in terms of the hypothesis itself, it can only be valid at the level of a more profound hypothesis.

So, our first answer, as we saw last time, is: No, no, absolutely not. All things considered, the recollection-image cannot provide us with the virtual image we are seeking. And why not? Because *the recollection-image is not a virtual image*. Aahhhh! The recollection-image is not a virtual image... but nonetheless its status is quite strange. Because nor is it an actual image. No, it's not an actual image either. The recollection-image... you recall that the expression *recollection-image* is an expression used by Bergson, and he states it very clearly, even if we don't yet understand what he means. So, you see, we proceed according to our method of feeling in a kind of philosophical sentimentalism. We have just a vague feeling when he tells us that the recollection-image is a virtuality, but a virtuality in the process of being actualized. It is in this sense that it does not correspond to a virtual image. Why, what does this mean, even if for the moment we cannot expect to understand much?

In an extraordinary text by Bergson, he tries to distinguish between what he calls pure recollection and the recollection-image.¹ Roughly speaking, he tells us – here I just want to retain the points that are problematic... so please don't ask me what he means, for the moment at least... we're just harvesting what he says... – he tells us that *pure recollection is a virtuality*. He adds that it is by nature unconscious. He even adds: an *original virtuality*. So we should not look for pure memories in our consciousness. Our consciousness will provide us only with recollection-images. So, why does he speak of pure recollection? In the name of what? We cannot answer this yet. For the moment, let's try to follow what he says: pure recollection-virtuality. But the recollection-image is not pure recollection. Moreover, the recollection-image does not resemble pure recollection.

The recollection-image is the actualization of a pure recollection. Why is this? Because as Bergson says: If you look at a recollection-image from all angles – that is, what we usually call memory – if you turn it around and look at it from every angle, you will not find within it the thing that characterizes it, namely, the mark of the past. So, what constitutes the mark of the past in a recollection-image? He tells us that the recollection-image must borrow the mark of the past that distinguishes it from some other image. It has to borrow something that we will call *pure recollection*.

But then, if it is pure recollection that communicates the mark of the past that is inherited by the recollection-image that actualizes it, what then is the relation between pure recollection and the recollection-image? It is not a relationship of resemblance. Pure recollection does not resemble the recollection-image that actualizes it. *Pure recollection is a pure virtuality*. And in another astonishing text,² Bergson says that pure recollection stands behind the recollection-image... it stands behind the recollection-image as the hypnotizer stands behind the hallucinations he provokes. Splendid metaphor, but is this something more than a mere metaphor? Considering the kind of cinema we are dealing with, our heart can only leap: *pure recollection stands behind the recollection-image as the hypnotizer stands behind the hallucination he provokes*. So now we can say, well, well, well... there's something very close to this in *Last Year at Marienbad*. There, we indeed have a hypnotizer who stands behind recollection-images – whether true or false – as he does behind the hallucinations he provokes.

So, the recollection-image... I'll just reiterate here that the recollection-image is not the same as pure recollection. Which means I can't say that a recollection-image is the virtual image I was looking for, for the simple reason that the recollection-image is not the virtual image – the virtual image is pure recollection – and does not resemble a virtual image. The recollection-image is the process of actualization of the virtual image, the process of actualization of pure recollection. So, to our regret, we have to give up the first hypothesis that the recollection-image would be the virtual image we were looking for, and last time we said, fine!

Let's move on to a broader circuit. In what way broader? Because, because... Oh, thank you for the chalk! You can tell that the year is drawing to a close because the pieces are getting smaller and smaller... You see, I'm sticking with it because the size doesn't matter. Here are my pure descriptions, which are actual images. Remember how we start with a description, we make a circuit, we come back to another description, we make another circuit, and so on. So, these are my descriptions as actual images... here we have a circuit, with recollection-images, another circuit, another group of recollection-images, another circuit... I can conceive of increasingly broad circuits that mobilize a greater and greater number of recollection-images. Okay, so that would give me this figure... you see, it's very clear, if you read it in terms of...³

So, I can only say... Oh no, these circuits where we had placed all our hopes are failing us. They do not give us real virtual images. So, perhaps they were not broad enough. We would have to discover a circuit – and this is our second hypothesis – if we can discover a circuit sufficiently vast to include all the various circuits of recollection-images, and that would borrow from all these circuits of recollection-images – from this one here, say, or that one over there... – wouldn't this give us the virtual images we were seeking? And this was our second hypothesis: the dream-image. The dream-image would be the virtual image we were seeking, in correlation with an actual image.

And when I say that the dream-image indeed develops over an extremely broad circuit that in a certain way, as we have seen, envelops all the other circuits... the dream-image is indeed a series of anamorphoses that never stop leaping from one circuit to another. I go back to one of the examples I mentioned before, the example of *Entr'acte* by René Clair. What do we see here? The streetlights of the city, the streetlights of the square – which I seem to remember is Place de la Concorde – the streetlights of the square are transformed into heaps of cigarettes that are standing upright, and then these upright cigarettes are transformed into the columns of a Greek temple. So, the anamorphoses of the dream mobilize different recollection-image circuits. Thus, we might say to ourselves: It's in the dream-image – and not in the recollection-image – it's in the dream-image that we can find the virtual image we are seeking. Well, I think we already sensed this at the end of our last seminar. But the answer is, once more, no. No to this second hypothesis. It's not that it's the same – it's better, it's nonetheless better than the first one – but it still isn't satisfactory. Why is this? What is the difference between a dream-image and a recollection-image?⁴

As I was saying, the recollection-image is a virtual image in the process of actualization, so it is not the pure virtual image that we were looking for. What is a dream-image? It's a set of images... yes, that's how I would define dream-images... they are a set of images, each of which is a virtuality that is actualized in the one that follows, which in turn is a virtuality that is actualized in the one that follows and so on, *ad infinitum*. And this is what the whole circuit of the dream consists of. So, the street lamps in Place de la Concorde are a virtuality that is inseparable from the movement by which this virtuality is actualized, but instead of being actualized directly, it is actualized in another image, the image of the cigarettes, which in their turn are a virtuality that is actualized in a third image, the image of the temple columns, and so on *ad infinitum*. You have a system of unhinging where it is no longer a virtual image that is actualized for its own sake, but a virtual image that is actualized in another image, which in turn is a virtuality that is actualized in another, *ad infinitum*. This is the

world of the dream, which is indeed completely different from the regime of recollection and of recollection-images.

But then, sadly, we have to recognize that this second hypothesis does not work either. Dream-images are not virtual images but images in the process of actualization, though in a completely different way than the recollection-image. The difference with recollection-images is that here it is always another image that actualizes the previous one. But this doesn't work, this doesn't work either.

So, let's not lose our momentum... is this okay, are you following me? It's enough if you follow me, though I realize it's tiring. So, anyway, our third hypothesis, we can always say to ourselves, our third hypothesis – because we've been talking about this sporadically all year long, so all the more reason now to recapitulate it – is that we haven't yet reached a sufficiently broad circuit. What would this be, a circuit that was sufficiently broad to give us a virtual image? *It would be the world or the universe as image*, the world or the universe as image. And what would it be? It would no longer be recollection, but neither would it be dream. So, what would it be? It might be something terrible.

The world and the universe as image... what do I mean by this? The world is indeed a virtuality, the universe is indeed a virtuality. If you take the phenomenological notion of *being-in-the-world*, or if you take the Kantian notion of world as *horizon*, as horizon of experience... Kant, for example, tells us that the world is an Idea, with a capital "I". What does this mean? It means that, by definition, the world is not given. It is a virtuality in the sense that *it is a representation that has no direct object*, it has only indirect objects. And what are these indirect objects? They are the set of objects of experience. Or, if you prefer, the set of all causal series, the set of causal series all the way to infinity. But in this object, it finds only an indirect object, one that constitutes the horizon of all possible objects of experience, unless it becomes actualized.

When does it become actualized? When the world becomes actualized, it's no reason to celebrate. When the world becomes actualized, it ceases to be the horizon of all possible images. To become what? To become an atmosphere, or quality, or movement of a certain type of image. At this point, being-in-the-world gives way to what someone, whom I will quote later, calls *worldizing*. Worldizing is the condition of being seized by the world. This passage from being-in-the-world to worldizing is something to which the psychiatrist Ludwig Binswanger,⁵ B-I-N-S-W-A-N-G-E-R, gives great importance. The phenomena of worldizing which are constantly occurring, and even through which one can – in a Binswangerian perspective – define psychosis, that is to say, that psychosis occurs as if it were defined by a worldizing affecting the whole of space-time.⁶

What does this mean? The world, by worldizing itself in this psychotic form, takes on certain qualities or certain movements – a certain viscosity, a certain precipitation – which designate both qualities and movements. What is special about these qualities and movements? Literally speaking, *they are qualities of the world and movements of the world*, they are qualities of the world or movements of the world. Worldizing consists in the emergence of qualities and movements of the world. What does this mean? It's quite complex. A little before Binswanger, a great French psychiatrist called Eugène Minkowski⁷ was already researching spatio-temporal structures in psychosis. It goes without saying that the space-time of the melancholic, the space-time of the schizophrenic, are not at all of the same type. These space-time phenomena are fundamental when the world ceases to be a virtuality – that is to say the horizon of a possible experience or being-in-the-world – to become quality and movement of the world, a worldizing.

What use is this to us? You see, this is directly useful for us since it corresponds to our third hypothesis. When situations are no longer sensory-motor, when they are cut off from their motor extension, it means that there is no longer a subject in the situation capable of reacting through movements of their own. But something is always possible. And at what cost? Simply, *it is always*

possible that the world takes upon itself the movement of which the subject is incapable. So, you can understand why this is our third hypothesis: when I find myself in situations cut off from their motor extension, that is, in situations such that the individual no longer reacts through movements of their own, *the world makes up for the failure of the subject.* It is the movement that takes up... No, sorry, it is the world that takes up the movement of which the subject is no longer capable, or no longer knows how to make. These movements of the world, independently of any psychiatric analysis, immediately attain their qualitative character: viscosity, rigidity – here all kinds of psychiatric profiles are possible – and fluidity.

There are fluid movements of the world. Binswanger analyzed these in terms of a phenomenon to which he gave great importance, that is to say, the “flight of ideas” in certain psychoses, the flight of ideas which defines these fluid movements of the world, a space-time that is completely fluid. There are strangely viscous space-times, in psychotic hysteria – hysteria always has this psychotic basis – in hysteria where the psychotic basis doesn’t simply appear, where you have phenomena of extreme viscosity... You have all these movements-qualities of the world that make up for the subject’s motor impotence.

On a more cheerful note – I allude to this for those who are interested in psychiatry and are therefore already familiar with this whole Binswanger school, which is very interesting and which to a great extent was taken up in France by Maurice Merleau-Ponty. Okay. It’s very interesting, and if I had time, I would develop further connections. There are great similarities between Binswanger and the French psychiatrist Minkowski, father of the current professor Alexandre Minkowski who I think specializes in delusions... so don’t confuse him with the old Minkowski who is no longer with us. Minkowski was a Bergsonian psychiatrist, one who called himself Bergsonian, who constantly claimed to be a Bergsonian, since these world movements were of qualitative duration. You see the link with the qualitative duration that Bergson invoked? Minkowski made psychiatric use of it in terms of these movements and qualities of the world.

So, this is quite useful. You can see immediately how Binswanger created an existential analysis, as we call it, in opposition to Freudian analysis, since for him diagnosis was entirely based on an analysis of worldizations, and not on an analysis of the libido. What interested him ultimately was space-time, which is to say the way patients experienced space-time, and in what qualitative form, and this is what he called *worldizing*, when the world ceased to be the horizon of experience, or being-in-the-world, and was transformed into its qualities and its particular movements, which took upon themselves the very movement that the subject was no longer capable of making.

But to move on to lighter matters, I’d now like to mention a space we could call that of enchantment or the enchanting [*féerie*]. Don’t get me wrong, I don’t mean to compare psychiatry to a generalized enchantment. So, what do we call enchantment? What we call enchantment, it seems to me, corresponds to a state of things when the subject has become incapable of making a movement, and the world makes up for the failure of the subject, that is to say, it takes up the movement that the subject can no longer make. If we look for what would constitute the essence of enchantment, it is always a movement of the world, a movement of the world that replaces the movement that one no longer makes. So much so that the most magical things – the enchantment may be that of nature, or it may be artifice – enchantment is the magic carpet, the conveyor belt – I mention these now because we’ll need them later on to look at cinema – it’s for example the escalator or the slide, *where movements of the world replace those of the subject.* We’ll see why I feel the need to situate enchantment not in terms of fairies, but in terms of... because fairies by themselves don’t do much else.

It is no longer the child that saves itself, *it is the world that saves the child.* The child is paralyzed by fear, but it is the world that takes charge of the movement they no longer know how to make, and the

whole world unrolls like a magic carpet that will carry them away to safety. Enchantment. A truly great film, *The Night of the Hunter*, lets us witness this taking over of movement by the world.⁸ If you remember, the escape on a boat of the two children, greeted by the whole of nature, where the boat glides along as if on a conveyor belt, while they are pursued by the maleficent power of the silhouette... the unforgettable silhouette of Robert Mitchum, which is like a Chinese shadow, that is to say, he too is cut off from his own movement – for those who remember *The Night of the Hunter* – when Mitchum pursues the two children into the cellar but all you see is his shadow, a shadow on the wall. We see his hooked hands reaching for the children and everything is a Chinese shadow-play. In this way, we find ourselves confronted with depersonalized, pronominalized movements. It's the path that slips away, it's the path that unfolds and so on. Pronominal... pro-no-mi-na-li-za-tion, pro-no-mi-na-li-za-tion, depersonalization, since the movement has become movement of the world and no longer of the subject. It is these two characteristics that define the worldizing of movement.

So, is this really a third hypothesis? Yes. I mean, of course, you find all this in dream. In dream, you find a lot of depersonalized, pronominalized movements of worldizing. You can find some aspect of this, but I don't think it's something that pertains exclusively to dreams. That's why dream has another formula: what pertains precisely to dreams is this actual-virtual, actual-virtual, the actual-virtual unhinging that we just spoke of in terms of a more or less broad circuit. But the great circuits of worldizing that may appear in dreams are not specific to dream. They can also be found in states of reverie. And we can find them in states of imagination, but this would be a very complex case that we don't have time to analyze here. If we have to express it as an idea, I'll just say there are cases where they belong... Yes, they do appear in dreams.

I'm thinking of a very important film, a film by Murnau – long lost, though I hear it's recently been rediscovered – called *Phantom*.⁹ Now, in Lotte Eisner's book on Murnau, there is a very long description of a courtyard, an extraordinary set that Murnau created. You will perhaps understand even better what can be called a movement of the world. Murnau... I don't remember, there's a small detail that I don't remember... I should have reread the text – it's the guy who did the set for Murnau, who explains very well what he did.¹⁰ There's the façade of a row of houses, the façade of houses on one side of the street. What I don't remember is whether they are real houses – as far as I remember they were real houses, so it must have been shot on location – or whether it was a set, but it doesn't really matter. Although I think it is even better, even more beautiful if they are real houses? Are they real houses?

Student: [*Inaudible*]

Deleuze: Almost, almost real. So, maybe his... anyway, they might have been real houses, provided he found a street that was half-destroyed, with a kind of wasteland on the other side where there were no houses. There, on the other side of the street, on the wasteland side, he erects some set houses, not even proper houses, just facades of houses. These are the three house facades of the set, which slide on rails. They are mobile, they slide on rails. A very complex system of lighting, of spotlight projections and their reflections cause the shadows of the fake houses to be projected on the sunlit side of the real houses. You see? At this point he shoots. We never see this set part, it seems to me we only see it on the sunlit houses, and on the street itself.

A carriage crosses the street at high speed. It's a dream, right? I forgot to say it's a dream. The hero is chasing the carriage, at full speed. You, you will say that he's running yes, okay, he's running, no matter. He makes a movement, it doesn't matter what it is. What matters is that at the same time, the facades run at full speed on their rails, so that the shadows of the projected facades run at full speed across the real, or pseudo-real, houses, with the effect that the hero is propelled by the movement of the shadows. You have a three-level movement: the carriage running, the hero running, the shadows of the houses chasing the hero. It's a splendid montage of sets.¹¹ Well, I would say that this is a

movement of the world. In this case, however, the hero moves too, yes, he moves, but this doesn't mean there isn't a movement of the world that propels him. The world has taken the primary movement upon itself. In this sense, you can recognize a sort of dream image, but one which is not necessarily a dream. I would say that this is much more an image of enchantment.

So, let me just conclude this point. It's here, in the little that I mentioned... it's here that I saw the essence of something that has a certain affinity with dream, but that we know very well is not dream: the musical comedy. Indeed, the musical is much closer to what we usually call *enchantment*. But what does the musical consist in? [*Tape interrupted*] [45:58]

... The set is depicted as a set, that is to say, we find ourselves in pure optical and sound situations... We have seen before how this is the very definition of description, when the set no longer refers to or supposes the independence of its object. One is thus confronted with a set-description, a pure optical-sound situation. And on the other hand, what is dance? Well, these pure sets or descriptions will no longer be linked up with actions, they will form a circuit with movements of the world.

You see, it's again our... it's our third level. But once more it's the same idea: instead of a linkage between sensory-motor situation and the character's movement, we now have a completely different case: the set, that is to say, the pure optical-sound situation, and the movement of the dance. Dance is not an action, dance is not a motivity. *Dance is a depersonalization of movement, a pronominal...* Oh, you can complete it yourself. Although I've sometimes used more difficult terms, but this one... *pronominalizing* of movement, this is a movement of the world, so it takes nothing away from the genius of the dancer, because a movement of the world cannot be produced by itself. It takes all the genius of the dancer to depersonalize movement and make it a movement of the world. And, as I was saying, what is it that shows the relationship between dance and the movement of the world? If we stay with the musical, it is because dance is also a matter of center of gravity. You dance when you embody a center of gravity that no longer belongs to you.¹²

And as I have already said, it's of course no surprise that there are two great styles of dancers, or two great dancers. In the musicals there are of course more but only these two are particularly remarkable. Because there are two ways to depersonalize the center of gravity. Either, as Kafka said, you make it sink into yourself. But how is this done? You make it sink into yourself like a rifle bullet, and when it sinks into your squat body – you have to have a squat, heavy-set body, I'm talking about the stocky dancer, the muscular dancer – the stocky, muscular dancer has to make his or her center of gravity sink into him or herself like a rifle bullet, in such a way as to liberate the mannequin of the dancer.

And to make the center of gravity descend, he will not hesitate to make movements – and here you recognize the beginnings of Gene Kelly's dances – that have great amplitude, very accentuated arm movements that will cause the bather doll or the mannequin that is the dancer to rise up. The center of gravity sinks. It is the method of the stocky body, the compact body. In the other method, that of Fred Astaire, the center of gravity is projected outwards to the limit. It passes through the silhouette or sometimes even continues into the shadows, passing through all the lines traced by the silhouette. This is the method of the slim body, the body without thickness of Astaire, whether he is in the shadow, and here we have Astaire's famous dance with his shadows...¹³ And I said, well yes, this is dance as a movement of the world.

So here I have a couple that form a kind of circuit. You see, I'm no longer faced with a sequence of actuals, I'm faced with the actual image cut off from its motor extension, that is, the set-description, which will form a circuit with processes of worldizing, dance as a movement of the world. What will this circuit be? It is that, in the end, the set-description will be presented for what it is: a flat view, a postcard view. And the movement of the world will give a space to this flat view. This is the secret of Stanley Donen. This is Donen's secret in his musical comedies: sets that become veritable postcards,

and the movement of the dancer that becomes a movement of the world which will give a depth to the flat view and trace a whole space around it, trace a space-time around the flat view.¹⁴

There would be a stage that would be even more... This, it seems to me, is Donen's formula, though I don't know for sure. But there is a formula that in a sense, from the point of view of concepts, goes even further, which is that of Minnelli. Minnelli. And undoubtedly it is Minnelli who brings the musical comedy closest to dream. Yet it's not the same thing as being in a dream. What is going on in Minnelli's cinema? I believe that there are two things. If you take – I don't want to say that it's any better, it's not to say that it's better, it's to try to distinguish them – if we go back to Donen's formula, it was set-description, flat view and movement of the world that traces a whole space around these flat views, or that gives a spatial dimension to these flat views.

Minnelli makes two discoveries. These two discoveries make Minnelli a giant of a filmmaker. The first discovery is that if you give movement to the world, you cannot stop there, meaning that there will be as many worlds as there are sets. There will not be one single movement of the world for a series of sets, there will be as many worlds as there are sets-descriptions, to the point that *each actual image will have its own world*. There is a very important discovery in Minnelli's films, which is *the plurality of worlds*. And then these worlds are no longer flat views, and they take on the rather psychopathological aspect of absorbent worlds. They absorb the hero, and they are almost dream worlds, but these worlds are dangerous, nightmare worlds, with their women-panthers and brutal wardens with their long nails and so on. But what is the movement of dance here? It will be very different. You see, here, we will have a completely different circuit from Donen's. It's no longer flat-view, movement of world that provides expansion. It will be: absorbent universe, as many universes as there are images. Each image has its own universe, each image has its own world.¹⁵

And what will the dancer's movement be in this case? It will be like entering a world without becoming caught up in it, and maintaining the possibility of passing from one world to another and then to another. And the dancer is the one who each time will enter a world, will enter an absorbent universe, but will not allow himself to be caught up in it, and will pass on to another world. Well, if this is what concerns Minnelli... at each level there will be a kind of absorbent capacity of the universe, or of the world, an absorbent world – we would have to consult Binswanger to see if there aren't any clinical profiles of absorbent worlds in psychosis – and in Minnelli's cinema this becomes more playful, although... it's still heavy. I don't know if Minnelli was completely all there, but his is a world that seems very, very close to pathology. And why? Because there is a problem, there is a crazy problem, there is a crazy problem in Minnelli, which I think is very, very interesting, and which constitutes a real philosophical, metaphysical, or even schizophrenic problem: Is it possible – and how, and at what cost – to enter into the dreams or the past of others?

You see how the other's dream or the other's past is the absorbent universe, the absorbent world, and this is why there's a plurality of worlds. Minnelli's characters will always be characters who are... Even when the film isn't a musical, this is Minnelli's entire obsession, the obsession of his whole oeuvre, but it's particularly visible in the musical which gives us the sweet enchanting version... though when it goes out of the musical, it's no longer so enchanting. I don't want to say that it becomes more serious, but we can see more clearly what lies behind such a vision of things, namely, these absorbent worlds, as if each of us was the possible victim, not of someone else, but of someone else's world and someone else's dreams. What could be more horrible than being caught up in someone else's dream? If I was only caught up in my own dream, I would always be able to get away, I would always be able to get out, I would always manage to get back to reality.

Remember, for example... for those who remember Minnelli's films, *Brigadoon*¹⁶ is the epitome of a closed universe, an absorbent universe, where the hero can only see the real world from which he has become disconnected through a kind of vast high-angle shot. He is absorbed in the past of an Other,

with a capital O. If you take musicals like *Yolanda and the Thief* or *The Pirate*¹⁷ – the first one featuring Astaire, the other featuring Kelly... What is Astaire's role here? In the light-hearted mode of the musical comedy, he is someone who becomes absorbed in a young girl's dream. It's a psychotic situation, becoming absorbed in someone's dream, a psychotic situation.¹⁸ Besides, it's very close to the situation of falling in love, but this is what is psychotic about love-affair type situations and it's a terrible thing, and the culmination of this will be in one of Minnelli's masterpieces, *The Four Horsemen of the Apocalypse*¹⁹, where the hero allows himself to become absorbed in a generalized nightmare, and this is Minnelli's perpetual theme.

So, in terms of his constant theme, dance becomes something quite different from what it was in Donen's cinema. While in Donen it was the movement of the world that once again expanded the set-description presented as a flat view, in the films of Minnelli dance comes to mean much more. It represents an entry or insertion into an absorbent world, while avoiding its dangers, and the passage from one world to another. Even when it's not a musical comedy. I think for example of a film that was broadcast on TV not long ago, I believe, which is called *Undercurrent*...²⁰ It's a very interesting film in which the heroine marries someone and, after marrying him, finds out that she is trapped in his nightmare. But in the depth of his nightmare, there is the dream of her husband's brother, and it is by allowing herself to become absorbed in her husband's nightmare that she will experience an absolute psychotic situation, and through which she will find salvation by penetrating the dream of her husband's brother. Minnelli's film is very cleverly set up and very well composed. And once again, the husband's brother, the dream that will gently come to absorb the young woman – since she has no other way out other than to be absorbed by either her husband's nightmare or by the dream of her brother-in-law – is obviously played by the great Robert Mitchum. Fine.

Okay, I've summarized a few points. We have a lot of other things to do. I would say that this is my third answer, but, alas, it's not really satisfactory. Though it's a little better each time, a little better... [Tape interrupted] [1:03:49]

Part 2

... between the actual image and the virtual image, this time there would be a circuit between the set-description and the movement of the world, as opposed to the linkage of actuals that occurs in sensory-motor situations. Does this give us the virtual? Does the movement of the world give us the virtual we are seeking? We have already seen that it doesn't. No. Alas, it doesn't give us the virtual we are looking for, since the movement of the world is precisely the actualization of the world itself as virtuality. An actualization, we must add, that takes place in a fairytale or psychotic space-time.

At the end of all this, we are back to point zero. What is the virtual image with which our actual image coalesces? Precisely because we have to ask the question again, everything has now changed. And we can say, well, clearly we took the wrong direction. We were looking for larger and larger circuits. We were looking for broader and broader circuits and we wanted our actual image to form a circuit with groups of recollection-images. It was already quite broad, and then with dream-images, it became even broader, and then again with world-images it got broader still.

So we can say, well, we would have to take the opposite path, since all these relatively large circuits... Can you close the door please? All these relatively broad circuits... what are they based on? Wouldn't they necessarily have a narrow base? If we go back to my diagram, wouldn't there be an extremely small minimum circuit? So that I would almost have this: *actual image / virtual image*.

If I found... I would have to find something that would form a circuit with the actual image *and that would have no greater extension than this actual image*, so, a very small circuit that would function

as the inner point of all the other circuits. You see, this would be like the end of the spinning top... the spinning top. Let's suppose a spinning top that keeps getting broader and broader, a conical spinning top that has larger and larger circuits that turn, but whose sharp base point turns on itself. This is the smallest circuit, which is what we need.²¹ You see how we got it wrong, we were mistaken. We were looking towards the broadest, whereas it is towards the narrowest that we should have been looking, the smallest. Only, is there a still smaller one? Well, yes, and if there is a smaller one, you will see that we have our coalescence. We will have the coalescence of an actual image and a virtual image.

What would be the proof of this? It would be better to say that the coalescence of an actual image with a virtual image will be given to us when we are able to say that this is the coalescence of an actual image with *its own* virtual image. Its own. The virtual image must be the virtual image of *this* actual image. In that case I will have the minimum circuit, I will have the basis of all the other circuits, I will have the minimum circuit, the smallest circuit in the world. Whereas before I was seeking it in the vast circuits of the world, so now we have to reverse the direction, but we have to come back to something I've already started on several times and that I now want to group together, because they are absolutely fundamental, a second series of extraordinary texts... When Bergson poses a question, you can understand it objectively and subjectively at the same time.²²

Objectively, he asks: When does the past appear? Does the past appear when the present is no longer? And subjectively, he asks: When does a recollection form? Does a recollection form when the perception has vanished? For example, I perceive this table, I turn away, I remember the table that I perceived. And he is the first to pose this very interesting question, that is to say... I believe that, if we pose the question, we can only answer the way Bergson does. There had to be the idea of posing it, and it's odd that we had to wait so long for this question to be asked... Time!

Bergson's answer is that it is obviously not when the present has disappeared that the past is formed. Just as it is obviously not when a perception has disappeared that the recollection of it is formed. Why? Because in that case, the past would never form and a recollection would never appear, it would never be formed. We could wait forever. We have no choice: either there will be no recollection and there will never be a past, there will only ever be the present. Or the past must be there at the same time as the present of which it is past. In other words, *there must be a contemporaneity between the past and the present that it was*. Or, what amounts to the same thing, *a recollection must be formed at the same time as perception takes place* and there must be a strict coexistence between the perception and its recollection, as there is a strict coexistence or contemporaneity between the present and the past... no, sorry, between the past and the present that this past has been. So, objective coexistence of present and past, subjective coexistence of perception and recollection, contemporaneity of both. Which amounts to saying what? The paradox is that *there is a recollection of the present*. The past is strictly contemporary with the present that it has been, *it is at the same time that the present is present and that it passes*. If it waited until it was no longer in order to pass, it would never pass and there would never be any recollection. What prevents us from seeing this?

So, you can see that Bergson's idea is very simple. Recollection... I will mark it here: recollection. R is strictly contemporaneous with perception, and the past is strictly contemporaneous with the present that once was: actual image/virtual image. You will tell me that if this were true, we would be able to seize this recollection of the present. But no, we can't. If there is a recollection of the present that is contemporaneous with the present itself, why wouldn't my consciousness be able to seize it? Because by nature it is useless. That doesn't prevent it from existing. How many useless things exist? The law of consciousness is utility. When is it that I need the past? When do I need to evoke the past? The Bergsonian answer is very simple: *I need to evoke the past in function of a new present*. It is always

in function of a new present, and it is in function of the requirements of a new present that I need to evoke the past.

But when I am in the present, in the moment the present appears, I never need to evoke the recollection of this present. I would need the recollection of this present only when it is no longer present, when there is a new present in relation to which the old present, that is to say, the recollection, will be useful to me. Yet the contemporaneous recollection of the present is of no interest to me. I mean, I have a recollection of everything that is present in the moment that it is present. But this recollection of the present is of no use to me, and it is in my interests to repress it. I will only evoke it once I exit this moment, if it is of use to me in my new present. For example, when I meet someone, I say: Oh yes, this morning such and such happened. It's useful to me in terms of the new present. But in that very moment, the past that was contemporaneous with the present was of no interest to me. In other words, I don't grasp it, it remains at an *unconscious* level. This direct recollection of the present, this recollection that is always contemporaneous with the present that it was, remains at an unconscious level. It will only become conscious in the form of recollection-images, in relation to a new present to come.

Except in one case: Imagine a kind of disorder – again, I'm speaking of pathologies – a kind of pathological disorder that doesn't permit me to adapt anymore. If there is a failure of adaptation, then I will simultaneously grasp the present as present and its own contemporaneous recollection. I will grasp the same thing as both perception and recollection. I will seize the same thing simultaneously as present and as past.

You can see that this proves our theory. For if these kinds of phenomena exist, even as pathologies, they can only be explained insofar as there is a recollection that is contemporaneous with the present. Otherwise, such states would be inexplicable. But this condition exists, and it is very well-known under the label, I believe, of *paramnesia*. But what is paramnesia exactly, which is sometimes also referred to as a feeling of *déjà vu*? It is certainly not a recollection. When we cannot explain a phenomenon of paramnesia, we invoke a reminiscence, we try to reduce it by giving it the impression of familiarity. This impression of familiarity, well, this impression of familiarity is like a feeling of resemblance. The present situation reminds me of something. Reminiscence. What does it remind me of?

Paramnesia has absolutely nothing to do with this. You can say, it's a question of degree. But it's not a question of degree. There is also a difference of degree between having hair and being bald. This doesn't mean that from one degree to the other you don't have a qualitative leap, that there isn't a qualitative transformation. Fine. Paramnesia is not at all a feeling of familiarity. It is the certainty of having already lived the present in its smallest details, in each of its particularities. It is a phenomenon of belief: one experiences the same thing as it is being lived and as it has already been lived.

Some subjects... just as there can be talented hypnotizers, some subjects have the gift of paramnesia. Some perfectly normal subjects have experiences, in fact all of us have experiences of reminiscence, of the type: Hey, this reminds me of something! Paramnesia, which is different from reminiscence, is a much rarer occurrence. Especially since it sometimes lasts an extremely short time... no more than a few seconds. You are in a garden with four people. All of a sudden, you have the certainty that the moment you are experiencing is something you have already lived down to the slightest detail. There is a sentence by a great Russian novelist called Andrei Bely²³ that I find so amazing that... I mean, it's always... in any case, it's something we'll have the occasion to speak about it again, but at one point he says: "it was all just an irritation of the cerebral membrane, unless it was a chronic malfunction... of the cerebellum, perhaps?"²⁴ I think about this in relation to ideal types. What was announced as being the advent of a nervous thought, that is, of a new form of cerebral excitation, turns out to be the

deficiency of the cerebellum in its pure state... and this is always the problem of the image and its caricature. One can never escape it, there isn't a single new image that doesn't give rise to, or that is sometimes even preceded by, its caricatures, its doubles.

So as for paramnesia, would this be an excitation of the cerebral membrane or a deficiency of the cerebellum? In the case of pathology, it has to be admitted that it isn't in psychosis that we find cases of paramnesia. Real cases of paramnesia relate to what we call processes of dementia. There is a type of dementia that is very interesting, well, very... it's called pre-senile dementia, which is a very, very interesting disease. You know how dementia is quite different from psychosis, because as you know, dementia is defined by processes of neuronal degeneration... when you have, as always happens, processes of degeneration or a deficiency of the cerebellum. There is a disease that I don't have time to explain to you right now, though there's always time if you're unlucky enough to have it. It's called pre-senile dementia because it doesn't arrive at the same process of degeneration as you have in full senile dementia, what is commonly known as cerebral softening. No, it doesn't attack the same nerve regions, and I believe that, not to slander her in any way, I think the tragic destiny of Rita Hayworth was to succumb to Pick's disease, a form of pre-senile dementia which can be quite dramatic, at least I believe so... In Pick's disease, you have very severe phenomena of paramnesia. [*An indistinct name*] lived through all of this; he lived exactly through all of these positions, all these situations...

So, you see, in paramnesia, Bergson is able to find a crucial proof of a first fundamental paradox of time. If I were to summarize this paradox, I would say that that whatever you do, you cannot escape the following situation: that the past must coexist with its own present. Our mistake is to always evaluate the past in relation to a new present in terms of which it is past, so we do not know how to evaluate the past in terms of the present that it was.

If we bring out this other dimension, we realize that the past is strictly contemporaneous with the present that it was. Or if you prefer, that recollection is strictly contemporaneous with perception. Bergson's text is very beautiful, I'll read you a short passage from it, providing I can find it. Page 114. [*Pause*] "The more we reflect, the more impossible it is to imagine any way in which the recollection – he puts it much more eloquently than I can, I would have been better to just stick to reading you the text – The more we reflect, the more impossible it is to imagine any way in which the recollection can arise if it is not created step by step with the perception itself. Either the present leaves no trace in memory, or it is twofold at every moment, its very up-rush being in two jets, one of which falls back towards the past whilst the other springs forward towards the future."²⁵ [*Pause*]

Well, in the second sentence, he says something that's quite new. It's one and the same. If it is true that there is coexistence, contemporaneity of perception and memory, that is, of the past and the present that this past has been, if the two are contemporaneous, how can we explain it? It is necessary that at each moment, time splits into two dissymmetrical jets, one of which springs towards the future while the other falls back into the past. At that moment, *the coexistence of present and past directly expresses this differentiation of time at each instant.*²⁶

You see that Bergson is in the process of throwing out all schemata of time based on succession, all the schemata of time that take the form of succession, to replace them with a movement of differentiation. At each moment, time differentiates into two streams, one that falls back into the past while the other tends towards the future, or if you prefer – what amounts to the same thing – time differentiates into two dissymmetrical jets, one of which makes all the present pass while the other preserves the whole of the past. *And time will be no more than the repetition of this perpetual splitting, of this perpetual differentiation, of this movement of differentiation.* In these two jets, I repeat, one of which makes all of the present pass – it is the present that passes – and the other of which preserves the whole of the past, it is the past that is preserved, and each time, you have a

coexistence of the past that is preserved and the present that passes, a strict contemporaneity of one with the other. Yet they differ in nature, these two directions differ in nature.

In other words, if I say that the past and the present, that recollection and perception, are strictly contemporaneous, I say that recollection is the mirror image of the present... no, I mean recollection is the mirror image of perception, or, if you prefer, the past is the mirror image of the present. Is this what Bergson says? Fortunately, he does say this. He says it when he writes... here it is: [*Tape interrupted*] [1:31:53]

... "A virtual existence," – that's what's written here, isn't it? Comma – "a mirror image". Period. "Every moment of our life" – every moment of our life – "presents two aspects" – at the same time – "It is actual and virtual, perception on the one side and recollection on the other... Our actual existence, then, whilst it is unrolled in time, duplicates itself all along with a virtual existence, a mirror-image."²⁷

Regarding this mirror image, this virtual image, you will say to me: But is this a recollection-image? No, it's a pure recollection. Maybe it's becoming clearer? It is not a recollection-image. It will become a recollection-image in relation to a *new* present. But in relation to the present that it *was*, it is not a recollection-image. Why not? Because it is a *purely virtual* image. Why is it a purely virtual image? Because it is not an image in the process of actualization. Indeed, it is the correlate of the actual image. It does not have to be actualized, since it is "one of the two sides" of a two-sided image whose other side is actual. *It is the virtual face of an image whose other face is actual.* It does not have to be actualized. It will be actualized, that is, it will become a recollection-image in relation to a new present, but in relation to the present that it was, it is not a recollection-image, it is a mirror image, that is, a pure recollection. It does not need to be actualized.

So, finally, we have our answer, we have the beginning of our answer. But between which two elements is the coalescence effectively produced? Between an actual image and *its* virtual image. And *its* virtual image does not present itself as a recollection-image, it presents itself as a mirror image, a reflection.

Is everything okay up to now? If all this is okay, you're all set for the follow-up. What I have just discovered, but I wasn't able to discover before. The big circuits, you see how my big circuits of recollection-images and then dream-images and even world-images, all rest on this little circuit. It's no more than a spinning top. It's all in complete disequilibrium. Everything rests on the smallest circuit, the smallest circuit, the minimum circuit of an actual image and its *own* virtual image. Nothing more. On one condition, which is this coalescence. There is no longer a linkage of actuals, instead there is a coalescence of an actual image with its virtual image. It is this coalescence that we call *crystal-image*.

And why do we call it *crystal-image*? I call it *crystal-image* on one condition: that such a coalescence *triggers an exchange*. That is, if there is coalescence between an actual image and *its* virtual image, the virtual image must become actual in a certain sense, just as the actual image must become virtual in another. In other words, a crystal-image must become the place of an exchange, it must correspond completely to what Gaston Bachelard called a "mutual" image. What he meant by a mutual image was simply that the crystal-image always involved more than one element, that is to say, it participated at the same time in earth and fire, or earth and water, or earth and ice, or earth and something else. For us, "mutual image" will mean that we cannot establish a consolidate in the minimal form of an actual image and *its* virtual image unless the actual and virtual exchange places. At that moment, when such an exchange occurs, we will indeed have a crystal-image.²⁸

Why will this be a crystal image? This is what we'll have to look at. I mean, we're not finished, it's by no means over. But we can see it right now, just as a way of getting started on our problem. You see how we start from the simplest thing. If I say a crystal-image, I don't yet know if the term is justified. For me, right now, a crystal-image is an actual image and its mirroring virtual image. So, it doesn't have to be actualized, it has no need to be actualized. So, there we have the consolidate of the two which is the crystal-image.

Okay, but after the consolidate, what is the formula? Of course, the two images are distinct, only they are indiscernible. A diabolical fate will make them distinct but indiscernible, in the sense that they are distinct because they are two, but I don't know which is one and which is the other. A terrible situation. Distinct but indiscernible, this is the philosophy of the 17th century in terms of the theory of degrees, or of the... they didn't have an adequate conception for such a painful, lamentable situation. Distinct but indiscernible. Why? Why? Because as soon as you establish coalescence, what happens? I'll start with the simplest case. We would call *crystal-image* the couple or the circuit formed by the actual image and the mirror-image. Once you have this, you have a circuit.

Here I want to mention Joseph Losey, or you could also cite Max Ophüls. This is where we find circuits, devices, famous 360-degree circuits obtained, as Losey says, with the help of mirrors, adding that it is better to use Venetian mirrors. You remember the presence of mirrors in *Eve*²⁹, or in *The Servant*³⁰. So what does this circuit constructed with 360-degree devices and with the help of mirrors give us? What does it mean? It means that once you have your consolidate, there is no way of stopping it.³¹ Meaning that the virtual image captures the actual character. The mirror image performs a capture. It captures. Insofar as it captures the actual character, it becomes actual. On one condition, which is that *the actual character becomes virtual*, and indeed, he will be pushed out-of-field. The virtual becomes actual at the same time that the actual becomes virtual.

This becomes very clear when the facets – hence my appeal to Venetian mirrors through Losey – when the facets multiply. The more the facets of the mirror multiply, the more the actuality of the actual image, the more the actuality of the actual character will pass into the multiplied virtual images, for example, where the same actual character is seen in a thousand facets at once. There is a great expressionist film that shows this: a couple or a tightrope walker are seen in the spectators' hundred pairs of binoculars. The multiplication of the facets of the virtual image will make it more and more capable of capturing the actual at the same time as the actual will be thrown out-of-field and will no longer exist outside of the mirror, that is to say, it will itself become virtual.

It suffices to put two mirrors face to face for the actual character to vanish, to become virtual, while the mirror image takes up the actuality. A famous case is *Citizen Kane*, where Kane passes between two facing mirrors. An even more famous case where it is enough to multiply the mirrors so that these multiplied mirrors capture the actual image as a whole, its actuality being only one virtuality among others, and where the characters, the actual characters, will only be able to regain their actuality by smashing all the mirrors, discovering that all the time they were standing side by side, and killing each other in the process – this is the famous finale of *The Lady from Shanghai*³². The few remarks I make here are perhaps enough for us to sense that we will find all the figures of the crystal image in the cinema of Orson Welles.

So, I would say that as soon as we have defined – our way of proceeding is, if you like, relatively rigorous – as soon as we have defined the crystal-image in terms of the coalescence of an actual image and *its* virtual image, we find that we have set off on a first path. If the coalescence occurs, there is an exchange between actual and virtual, the virtual becomes actual and the actual becomes virtual. It is not so much the coalescence of the actual and the virtual that defines the crystal-image as this exchange between the two, where the former never ceases to become the latter and where the

latter never ceases to cease to become the former. There is thus an exchange between the actual and the virtual.

You see, first degree, a very general definition, I would even say a nominal definition of the crystal-image: coalescence of the actual image and its virtual image.³³ The first aspect that follows from this: exchange of the actual and virtual in the crystal-image. So, my question is: And then what happens? Because this isn't sufficient for us. So I repeat my question from last time, what possible occurrences will there be? That is to say, what aspects will we be able to... is there anything that links to this first state of the actual-virtual exchange? You can easily sense how this isn't sufficient for us. This can't be the end of the story. So we have to search, we have to seek out other elements. Are there other determinations of the exchange? Are we done with the question of the actual and the virtual? Listen, please, just five minutes break but no more, right? Five minutes, you come back in five minutes.
[Tape interrupted] [1:47:22]

There are two couples that should not be confused, that should not be logically confused: real-possible and actual-virtual, I mean, it's fundamental... that's why another dream I have, even if it will never happen, is to do a course in terminology. As a practical philosophical exercise. You see how *virtual is not opposed to real, virtual is opposed to actual*. What is opposed to real is possible. Hence what is possible is either realized or not realized. While the virtual is either actualized or not actualized. The virtual as virtual – meaning, not actualized – can be conceived as having its full reality. I can speak of a reality of the virtual as such. Hence, for example, is a formula of Proust in the purest French: “*réels sans être actuels, idéaux sans être abstraits*” (“real without being present, ideal without being abstract”).³⁴ The virtual has a reality, there is a reality of the virtual. You see? This changes everything. When I say the actual image and its virtual image, the whole thing is real. The virtual is not at all a possible. And this is a simple statement of logic.

So, obviously, this holds sway over many things since, in the philosophers you know, in the thinkers whose work you know, you might wonder... a choice is being made regarding these kinds of problems. There are those who have bet on the real-possible couple and then, you have those who have bet on the actual-virtual couple. Generally speaking, philosophers of the actual-virtual couple are critical of the notion of the possible, saying that the possible is a false notion. So things get very complicated.

But for the moment I come back to exactly the point we are at now: we have a first element of the crystal-image. This first element is actual-virtual. So I say, here is the first element. What form does this element take? I don't say "how is it realized" because it already is real. It is perfectly real in the same way as the circuit of exchange where the actual becomes virtual at the same time that the virtual becomes actual, distinct and yet indiscernible. Distinct because there is always an actual image and its virtual image. Indistinguishable because we cannot know which is the one and which is the other...
[Tape interrupted] [1:50:52]

Part 3

... since there is an exchange. I would say this is the first dimension, and I return to what I asked you to do last time. If you want to do some research, well, as I was telling you, here we are trying to see if we can form a notion of the crystal-image. Now already, some of you told me, during our short break out in the cold, that at this first actual-virtual level I was leaving out many elements. Because who is it that deals with this question of virtual images? It's the field of optics. Okay, I myself employ the term virtual image, but I have justified my use of this in a way that wouldn't be orthodox with regard to optics. Fine. But it doesn't matter. I would say to you that regarding this first actual-virtual dimension, if you wanted to pursue it – I admit I've only just touched upon it – you would have to look into the field of optics and see what you can glean from this.

And I repeat my invitation. It's not simply a question of applying optics, it is not a question of giving you an optical diagram and then applying it. It is a question, as I said last time, of extracting from scientific schemata certain characteristics that might pertain to a philosophical concept. It's not a question of applying them. What you have to do is to take up scientific operators and transform them into conceptual dimensions. That's all. If you can do that, you won't have to worry about whether something can be stated scientifically. Actually, you will be very surprised to find that the scientists – who are much more intelligent than they say – will tell you upfront... they'll tell you that what you're saying may sound highly odd but yes, it can be discussed. Provided you don't have the pretense of reflecting on the sciences or you don't try to apply their schemata to areas that are not well suited to them, you can get along very well with scientists, and at that point they can they teach you a great deal.

Hence the question I was asking. So, though we are seeking another element, and then another still that would constitute new elements of the crystal-image, for the moment we only have a first element. The crystal-image is the base point of the spinning top, but it has other elements. It is the point of the spinning top, but it contains other elements since it is a coalescence. It is a circuit: actual image/its virtual image. This is not the only case. For those who know a bit about the Epicurean atom, the Epicurean atom is indecomposable, and yet it has parts. The physical point has parts, the mathematical point also. The physical point has parts, or rather it has elements. It has indivisible elements. So, there is no problem there. I would say that here it's from crystallography that we want... that we want to extract something. If it fails, then it fails, too bad... they'll tell us all this is ridiculous. But if it works, then so much the better. It's the crystallographers who we should be asking for elements. But we shouldn't expect them to treat us as if we wished to do crystallography. I mean, they know very well... they will understand very easily if we can explain to them what it is we're seeking. It is not a question of going back to school and making up for the knowledge that we do not have.

It's a question of managing to make a *capture*, a graft, grafting bits of science onto philosophical concepts, grafts of science that will not be elaborated scientifically but that will nonetheless have relations of resonance with what science does. So, making a graft of science consists in making selections, independently of the linkages that connect the scientific operators themselves. That's why I would like to say – before explaining what will happen – I would like to tell you what I wish to retain from crystallography. I have my first dimension, actual-virtual, and their exchange, okay. And then, I don't know what else, let's suppose I developed this in relation to optics, which I didn't do. It's up to you to do this if you're interested.

And then I browse through a crystallography textbook. And I come across something that comes up all the time: opaque-limpid. This is crystallography. Except that these are not concepts. Science does not form concepts. We will see that they are operators. They are chemical operators. There are geometric, algebraic, physical, chemical operators. Crystal-limpid is... no, sorry, opaque-limpid is a crystallographic operator. I say to myself: ah! I might not understand anything. What I mean is that if you don't first have the idea, you'll never have it. So, I say to myself, well, that's good, and I put it aside. What does this mean? I decide I'm going to keep this dimension of opaque-limpid, and I accompany it with a question: Could we say that there is a real crystallographic exchange where the limpid becomes opaque and the opaque limpid? That would be nice. Because if the hypothesis can be verified, I could say that this would be a continuation of the actual-virtual exchange. I will have to show that the actual-virtual exchange is resumed in terms of an opaque-limpid exchange, the opaque becoming limpid and the limpid becoming opaque.

So, to define the crystal-image I have my first couple: actual-virtual and, as luck would have it, a second couple then comes to me: opaque-limpid. And I sense how nice this is, and that it represents a

displacement. On one line I will have actual-virtual, then the couple will shift to form a new exchange, engender a new exchange, between the limpid and the opaque. And lo and behold: we will have made the limpid and the opaque a dimension of a philosophical concept.

Leafing through my crystallography manual, I notice a third element, a third pair of things that I like the look of, and that keeps coming back. It's a question of "taste". That's why there's no point in saying to me: well, of course, many other things are possible. Flipping through your manual, you will take a liking to others. I skip a lot of this stuff! I take up operators just like that to see if I can do something with them.

So, the third couple that comes up all the time is: seed and milieu. Seed-milieu, because the crystal doesn't exist. Oh, it doesn't exist? No, a crystal doesn't exist, a crystal is a limit. Everyone knows that a crystal grows from its edges, it grows from the edges. It is a border. A border between what two things? Between a seed said to be "crystalline" and a milieu said to be "crystallizable". So the crystal is what the seed has crystallized from a crystallizable milieu. What a strange kind of existence! You see, seed-milieu, in its turn, will also constitute an exchange. I don't yet know how. Here I have my three couples: actual-virtual, opaque-limpid, seed-milieu.

I would say that if I didn't have these three dimensions, I would give up on my crystal-image. These three are sufficient for me, and you can make all the objections you like. You can tell me that they are not enough for you. You can tell me you need more, you can tell me you require more. But I say, I'm fine with this. You see in what sense that there is never any reason to make objections. There is a reason to do otherwise, or to do better, to add dimensions, fine. Add others, that would also be great. We'll see what works, what doesn't. The question is: will we have formed a consistent concept, that is to say, a truly coalescent crystal-image, where the exchange... So you see, for my purposes I would define the crystal-image as the place of a triple exchange: actual-virtual, opaque-limpid, seed-milieu.

And I would say that in cinema – but we could do the same research in painting – I would say that in cinema what I call crystal-images are images that combine these three dimensions, though we have to see which filmmakers make... which authors make use of crystal-images and in what way this matters to us. And so, this is what I wanted to do. You'll grant me that this is still a hypothesis, given that I haven't completely justified my first dimension of actual-virtual and their exchange. But regarding the other two, it's a program that I've just sketched out, a program that is once again solely connected to my own taste. It's what I feel like doing.

Beneath concepts, as Nietzsche said, there is always a dimension of "what I feel like doing". Why? Why? Why this rather than something else? These are not questions worth asking, it's just a waste of time. Why this rather than something else? If it's a question of something else, do it yourself, or let someone else do it. That way there will be no question of why this rather than something else. Because if you ask why this rather than something else, you might as well let someone else do it, okay. In any case, there will never be any discussion. There will only be work that converges. Or else, there will be work that comes to a dead end. Philosophy has never proceeded by way of discussion or objection. So, well, there you have it.

So, I would like to finish on this point. There is a guy here who, for reasons of his own, happens to be both a cinephile and someone who has studied crystallography from a scientific point of view. And we had an agreement that was more or less... if it's still okay with him, I asked him to go over everything he knows about crystallography – because he knows more than I do – under the conditions that I just stated: not to try and furnish us with crystallographic schemata that would be beyond us, but so he could do the way I did with the three dimensions I managed to extract... he may well come up with the same, but then I'm sure it will be from a different point of view, or he could shed some light, to cite just one example, on a very exciting field in crystallography, which is – I say this for

those who know, for the mathematicians here, though I don't know if he's going to speak about it – that of isotropy and anisotropy. Namely, crystals have often been defined as *anisotropic* bodies, that is to say, bodies whose properties vary in value according to the directions they take, which is a very interesting notion. Without doubt we can draw something from this regarding the crystal image. It is an *anisotropic* image, whose properties vary according to its directions.

This is something I've completely skipped up to now. Another case would be those very, those extremely bizarre things we call liquid crystals. I can't see a way to use liquid crystals, which nonetheless concern the image, which concern the question of the image, other than in what would be a highly secondary sense, because I can't manage... I'm not able to make a proper dimension out of these. We could conceive of a liquid exchange... liquid-solid, I don't know. So, this means that nothing is prefigured in advance in research of this type. Hence my question. And if you want, those who are interested, you should add some paths, depending on your own taste. But Jouanny, what direction would you take in research of this kind?

Jouanny: [*inaudible comments*] There are several... [*indistinct words*] here, and very often we see great things that might develop in relation to this work. Because for crystals that are anisotropic, the other problem which arises is that when, finally, you take a particular regime that has developed while it was crystallizing, a certain form will be obtained. Whereas at other temperatures and other pressures, a different crystallized form will result with other physical or chemical properties, and it can happen that other compounds that don't have the same chemical form, are not at all... as soon as you have the same crystalline form, there are properties which can be assigned in relation to that form... [*indistinct words*] It varies enormously according to the molecule you begin with and then according to the geometric form. So, it cannot really be said that there can be crystalline forms that go in a certain direction, with certain properties.

Deleuze: No, no!

Jouanny: I didn't manage to... [*indistinct words*] That's why I have not done any research in this direction. As for liquid crystals, it is... [*indistinct words*] although it is possible that... [*indistinct words*] but liquid crystals are a type of matter that is not so much liquid as it is not completely solid. It's enough to heat it up or let something pass through it for a crystallization to form all of a sudden that causes it to change color, a process which is used in... [*unintelligible words*] This is much more than just playing on a difference in color in a product because its characteristics change. So, I couldn't really see how... since it wasn't particularly related to the structure or construction in terms of faces or facets or directions... [*inaudible words*] but was really a change in nature... [*inaudible words*] Basically, that's how it works.

Deleuze: You don't see the possibility of situating liquid crystals in opposition to the two amorphous states – which we are anticipating since we haven't yet spoken about them. Roughly speaking, the amorphous would be what does not have a privileged direction. Crystalline would be what has privileged directions.

Jouanny: But the problem is that liquid crystals are almost... [*indistinct words*] they have one type of organization as fluids, and another as solids. So, you can't really say that this is a liquid. It's not mercury, for example, that you can even cause to flow. They are really crystals that are at the beginning of a fluid state, or that are at the beginning of a solid state. They are in between the two.

Deleuze: So, wouldn't you say that they have a possible role in amorphous-crystalline circuits?

Jouanny: I don't know. In any case, their nature... they don't teach us much. They can teach us something about the phenomenon of crystallization. This begins all of a sudden, in a matter of a few

seconds they can pass from a liquid form, or almost liquid to a solid form. But they cannot teach us how a phenomenon of germination might function.

Deleuze: Germination...

Jouanny: ... germination, which is quite different.

Deleuze: Ah, yes... okay.

Jouanny: There is a problem in terms of dynamics. Regarding germination, there is a big problem... [*indistinct words*] There is a big problem owing to the fact that... [*indistinct words*] As soon as one side is completed, a new one must be able to start, and this can take a long time. There has to be a very slow physical phenomenon – which chemists are desperately trying to speed up – that causes it. This is a phenomenon that is highly present in the problems of directed crystallization, and which is absolutely not the case with liquid crystals.

Deleuze: Yes, yes, yes. What you just said is really important because it lets us foresee what will our conclusion will be, namely, that the spatial properties of the crystal-image are very particular and cannot be explained. In particular, the fact that there are privileged directions, which imply a whole space that is ultimately – what I'm saying here is almost nonsensical – irreducible to Euclidean space. That is to say, it can no longer be interpreted directly in terms of spatial structures, but necessarily brings a vector of time into play. It is this relation of the crystal-image to time that will ultimately be the essential rapport for us.

Jouanny: There is a phenomenon that is relatively difficult to perceive... [*indistinct words*] and for the chemists, that is to say, for those who want to prepare any... [*indistinct word*] The only thing... [*indistinct words*] was not perfect, that is, there is an impure... [*indistinct word*] they are dealing with mechanisms that are not perfect... [*indistinct words*] is that one would like to bring out a better-quality product. We were constantly confronted with a lack of technique, that is to say... [*indistinct words*] We are confronted with a problem, that we cannot go fast, that is to say, to do it all in one go. A chemical reaction requires time to take place, and we cannot accelerate it by increasing the... [*indistinct words*] or by increasing concentrations, or else we will no longer obtain the desired product, that is to say, we capture the mercury or... [*indistinct words*] we can no longer obtain it.

So, until now, we could think that better techniques, or more perfection, would let us go faster in obtaining a result, whereas now, in chemistry, we are confronted with a problem of time which means that a reaction allows us to have this result for such and such a time, and we cannot go beyond this limit, or else we must find another way to create the molecules... [*indistinct words*] So in the case of crystals or diamonds, for example... [*indistinct words*] to make synthetic diamonds, or else there is the case... [*indistinct words*] a problem that cannot be solved because it takes an enormous amount of time... [*indistinct words*] for carbon atoms to be placed correctly and to germinate in relation to the others, in order to obtain... [*indistinct words*] and so we might indeed think that this is a pure form of time, since we cannot manage to make... [*indistinct words*] and accelerate its progression [*indistinct words*].

Then there is another phenomenon that is interesting in relation to... [*indistinct words*] speaking of time. It is that in the germination of a crystal, when the first reactions of crystallization begin to take place – those of a diamond for example – the only thing that allows the diamonds to develop are the movements of the world, as we call them, that is to say, the fact that the external milieu which, after a certain number of years, a hundred or two hundred years, causes... [*indistinct words*] where a certain number of conditions gather around this diamond, provoking a single germination, or perhaps two, and all this is totally conditioned by the fact that the earth or the soil... [*indistinct words*] rub against

each other and bring them into contact with the atoms [*indistinct words*] It's here... [*indistinct words*] the mechanism, we could think in terms of the *élan vital* where... [*indistinct words*] matter changes its state because... [*indistinct words*]. It's nature itself that creates a movement, that creates a phenomenon that causes this matter to appear. Again, maybe we can't move something... [*indistinct words*] What is interesting about crystals is that when we see the development of crystals, we realize that in plants... [*indistinct words*] but we see that in crystals we are dealing with a more elaborate form... [*indistinct words*]

Deleuze: So, you see that could be our conclusion, at least so far: the crystal-time relation. But then, since you just said that there isn't much we can get out of anisotropy, nor from liquid crystals, what would you consider usable characteristics?

Jouanny: There is something that greatly interests me in cinema, or in crystal-images in advertising: the fact that they have something that does not function in terms of the chronological order of events. When we observe the development of crystallization, the phenomenon of crystallization, we see that as soon as a seed exceeds it, it develops in a whole series of... [*inaudible words*] germination, all the atoms that are crystallizing one after the other are not placed in a chronological order. That is to say, this facet does not have a sense of development that could be... [*indistinct words*] going backwards. This happens in many different ways that aren't exactly anarchic but neither are they chronological. Since the four or five facets of the crystal develop in a quite similar manner, even if independently of each other, this means... [*indistinct words*] not well organized, but we have a mass... [*indistinct words*] All this is... [*indistinct words*] There is no logic in terms of a chronological order, first of all because you have to wait sometimes hundreds of years... [*indistinct words*]. So, there's a whole series of phenomena that are quite definitely asynchronous... [*indistinct words*]

Deleuze: This is very important. It's very important because in my view it would allow us to say that, translated in terms of the concept that we are looking for – and this will already be our conclusion – we must distinguish the crystal-image – assuming that we have managed to define it, that we have completely defined it – we must distinguish the crystal-image from what we see in the crystal. So, moving on, we will once again find our idea of the seer. There is always... [*Tape interrupted*]
[2:18:00]

... I would say that this is what we see in the crystal. It is our reversal between movement-image and time-image. The time-image gives itself to the crystal. Therefore, this cannot be a chronological time, which is essentially a sensory-motor time, one that unfolds in a perfectly Euclidean space and in real milieus. Because, thanks to something we have not yet analyzed, namely the seed-milieu couple, we will realize that the milieu changes completely in meaning and ceases to be a real milieu when it becomes a crystallized milieu or even one that can be grasped as crystallizable. So, the milieu that is integrated into the crystal is a crystallized milieu that no longer has anything to do with a real milieu, again, with a real milieu, hence the particular characteristics of the space that it occupies. And therefore, this time that we see constituted in the crystal-image, is necessarily... must necessarily be a non-chronological time.

So, regarding this question, we are faced with several problems... about which you can perhaps tell us something more. We can say that the direct time-image is necessarily the image of a non-chronological time while the indirect image of time always maintains some relation with chronology, even when chronology is shaken or overturned. But there are many ways to constitute a non-chronological time, particularly in relation to the new nature of milieus: the crystallized milieu, the Riemannian space, the topological space that I was talking about last time. So many ways. So, in the end, I would say that we should speak in terms of non-chronological time, because regarding probabilistic time... I don't dare say quantic time but a time with discontinuous jumps... There will be all kinds of figures of non-chronological time.

I'm very interested in the fact that you just talked about the necessity of introducing a non-chronological time in the process of crystallization. This is an area of crystallography that I'm not familiar with. To the best of your knowledge, have physicists and chemists tried to give this non-chronological time a particular status? I mean, our immediate conclusion was that these must be probabilistic times. Or perhaps not... for at the same time, I tell myself that they surely can't be probabilistic times.

Jouanny: [*Inaudible remarks. He is probably addressing the problem chemists have in producing crystals of as perfect a quality as possible*] And this can give rise to a plane that will develop in the form of a spiral. Instead of developing flatly, all of a sudden... [*indistinct words*] by precisely placing the parasitic atom, almost naturally, or by trying to... [*indistinct words*] a crystal development that proceeds in a spiral and not with each facet facing the other. This is actually very interesting because on account of this spiral, the crystal grows a little to one side, since it doesn't contain a large milieu within, but it doesn't show this. This allows us to have crystals of a very large... [*indistinct word*] real though not perfect crystals which grow in a spiral and that, precisely in order to resist this problem of chronology, manage to have... [*indistinct word*] classically pure... [*indistinct word*] But as for probability, indeed... [*indistinct word*]

Deleuze: We can work from this aspect. Can we think of it in the following way: that the time we see in the crystal, that is to say, that belongs to the crystal, is in any case a non-chronological time, but there is no reason to think that it doesn't have a unity that is not negatively determined? So, there is not a single non-chronological time; there are all sorts of non-chronological times. When non-chronological time passes through planes, if I understand correctly, it is very much linked at that point to the anisotropic aspect, because the planes pass through privileged directions. That is to say, there is a relationship with anisotropy as its basis. You wouldn't have this planar organization, if these privileged directions didn't exist.

So, I can say, in terms of the development of the planes – I withdraw my word "probabilistic" which is surely not very apt – there is already a certain type of non-chronological time in the precise sense that you just mentioned. It is not arranged... the points of the network are not arranged according to a chronological order of connections. So, this is a first type of non-chronological time. When you invoke the synthetic operation, which you define very well and I find very interesting, what gives rise to this kind of spiral, a spiral of catastrophes, doesn't re-establish a chronology. Obviously, there's another type of non-chronological time. And I have the feeling that there must be all sorts of figures of non-chronological time. Would you agree with this? This would work well for me because it would be what remains for us to explore following the crystal-image, precisely the figures of time that we discover in the crystal-image whose only point in common is this negative character.

Being direct images, direct time-images are not chronological, since chronology is the subordination of time to movement. If you reverse the subordination between time and movement, if you ensure the independence of time – which the crystal-image does – obviously you can no longer have a chronological time. You have precisely what we can call *real time*. But real time can be a multiplicity composed of many very different times. Are there others? I can already see several possible types, but I can't connect them to the crystal. Because, as you say, there are indeed phenomena of fragmentation. And these phenomena of fragmentation will be essential for us.

Anne Querrien: [*Inaudible remarks. Her question concerns the application of these perspectives to music*]

Jouanny: [*Indistinct remarks*]

Deleuze: Regarding parallels with music, at this point I want to tell you about... I remember a text that I read a long time ago, it must have been five or six years ago, a text by Pierre Boulez that presented... that fell under the general topic "musical time". And I was struck by this. He analyzed four or five works, a work by Ligeti, a work by Messiaen, one by Carter and a work of his own. Yes, I think it was these four.³⁵

And in all four cases, he identified – I have to find this text, it's very interesting – he identified a type of non-chronological time, and in particular I remember that he made a very rapid analysis of probabilistic time in Messiaen, whereas Boulez, who was a student of Messiaen, absolutely didn't want a probabilistic time. So, we should see if we couldn't – because it's clear that the idea, the idea of a sonorous crystal which we've talked about a little bit this year, is perfectly well founded, if only because of the sonorous properties of crystal.

So, starting from the sound dimension of the crystal, which should be taken into account – but this is not strictly connected with what we are saying – we could rediscover musical times which are themselves by nature non-chronological times. There is indeed a chronological time in music, which is the cadence or the measure, but musical time is by nature a non-chronological time, rhythmic time is by nature non-chronological, and this is not the only case. So, in all these respects...

What you add here seems to me highly important, and ultimately it sets us on the path towards our conclusion following... But then, I come back to my last question because you could develop it the next time, or else, since what interests you is the question of time, if you want, you can take it up again when we get there, since I think you have very eloquently opened up this question. Do you have any paths, apart from this discovery of non-chronological time, are there any aspects of crystalline networks that you think we should retain in the same way as the opaque-limpid or seed-milieu?

Jouanny: [*Inaudible words*] The problem of crystals... [*inaudible words*] more or less limpid. But also... [*indistinct words*] when we look at a crystal, it will become opaque or limpid... [*indistinct words*]

Deleuze: Okay, so much the better, so much the better, this will be the exchange!

Jouanny: Yes, an exchange. It depends on which side it becomes clear, on which... and here we can bring in the mirror... [*Inaudible remarks*]

Deleuze: Listen, all this is very interesting, but I have to stop you because there's a class afterwards, we have these problems every time. This is what we need. Keep hold of this for the next time, okay? What you can do, if you don't mind... next time, you can begin with these two ideas of the crystal... You can think about that, unless you have something else to add. And you can develop from there. You brought up new aspects regarding the limpid-opaque question, and that of the seed-milieu. You've already spoken about the seed-milieu a little today but next time you can go on from there. [*End of the recording*] [2:31:58]

Notes

¹ Deleuze develops these points in *The Time-Image*, pp. 45-49.

² The passage Deleuze refers to here, from *Mind-Energy*, is the following: "The recollection of a sensation is capable of suggesting the sensation, I mean of causing it to be born again, feeble at first, then stronger and stronger in proportion as the attention is more fixed upon it. But the recollection is distinct from the sensation it suggests; and it is precisely because we feel it behind the sensation it suggests, as the hypnotizer is behind the hallucination he provokes, that we localize its cause in the past." See Henri Bergson, *Mind-Energy* (trans. H. Willdon Carr), Westport, London: Greenwood Press, 1975, pp. 161-162.

³ The figure he draws corresponds roughly to that of Bergson that Deleuze presents in *The Time-Image*, p. 289, note 4.

⁴ See the reflection on this difference in *The Time-Image*, pp. 56-59.

⁵ Ludwig Binswanger (1881-1966) was a Swiss psychiatrist and pioneer in the field of existential psychology, the first physician to combine psychotherapy with existential and phenomenological ideas, a concept developed in his 1942 book *Grundformen und Erkenntnis menschlichen Daseins* (*Basic Forms and Knowledge of Human Existence*).

⁶ Deleuze indirectly refers to Binswanger's theories in *The Time-Image*, pp. 59-60, 291 n. 19.

⁷ Eugène Minkowski (1885-1972) was a French psychiatrist of Polish origin, known for his incorporation of phenomenology into psychopathology and for exploring the notion of "lived time". A student of Eugen Bleuler, he was also associated with the work of Ludwig Binswanger and Henri Ey and was influenced both by phenomenology and the vitalistic philosophy of Henri Bergson.

⁸ *The Night of the Hunter* (1955) is a film directed by Charles Laughton from a screenplay by James Agee and starring Robert Mitchum, Shelley Winters and Lillian Gish. Combining elements of fairy-tale and film noir, the film centres around a psychotic killer who upon his release from prison poses as a minister and begins to prey upon the family of his former cellmate who, before his execution, revealed to him that that he had hidden a large sum of cash from a bank robbery to provide for them after his death. Much maligned upon its release, Laughton's first and only film as a director is now widely considered a masterpiece of post-war American cinema. See *The Time-Image*, pp. 59-60.

⁹ *Phantom* (1922) is a German expressionist film directed by F.W. Murnau and starring Alfred Abel and Lya De Putti. The film is the retrospective account of a clerk and aspiring poet who is knocked down by a woman in a carriage driving two white horses, and who subsequently becomes obsessed with her to the point where he is propelled into a life of debt and crime.

¹⁰ The description of the set, given by Murnau's production designer Hermann Warm, is as follows: "The left side of the street was actually built, with houses of cheap material. Between the houses were quite large spaces, which were invisible because they were hidden by hoardings. In this way I gave the impression of a long street of uninterrupted façades: it had to be a long street because the coach with the white horses was supposed to gallop along it. The right side of the street was faked. The gabled fronts of the houses were made of plywood and mounted on sloping rails so that they could be made to move faster and faster. Behind all this, still on the right, was a ramp with very powerful arcs, so that the moving houses could throw their shadows on the opposite side of the street, where the buildings were motionless and bathed in livid moonlight. In this way we succeeded in making it look as if the shadows of the houses were pursuing the young man as he ran after the carriage." See Lotte H. Eisner, *Murnau*, London: Secker & Warburg, 1973 p. 99.

¹¹ On Murnau's *Phantom* see *The Time-Image*, p. 59.

¹² On the musical and dance, see the previous sessions, especially Seminar 17, April 24, 1984.

¹³ In George Stevens' *Swingtime*. See Seminar 17, note 58.

¹⁴ On Donen and the musical, see the two previous sessions, 17 and 18. See also *The Time-Image*, pp. 61-62.

¹⁵ On Minnelli and these discoveries see *The Time-Image*, pp. 63-64.

¹⁶ *Brigadoon* (1954) is a film directed by Vincente Minnelli adapted from the Broadway musical by Frederick Loewe and Alan Jay Lerner and starring Gene Kelly and Cyd Charisse. The story concerns two hunters who chance upon the mythical Scottish village of Brigadoon which only appears to outsiders once every hundred years. One of the men falls under the spell of a village girl but he is told that no villager can ever leave Brigadoon, or the village will cease to exist.

¹⁷ *Yolanda and the Thief* (1945) and *The Pirate* (1948) are musical comedies directed by Vincente Minnelli, the first starring Fred Astaire, the second featuring Gene Kelly and Judy Garland. The stories of both films concern men who are trapped into playing dangerous fantasy roles when they become caught up in a young girl's dreams.

¹⁸ Deleuze refers to this aspect of Minnelli in *L'Abécédaire*, "I for Idea".

¹⁹ *The Four Horsemen of the Apocalypse* (1962) is a film drama directed by Vincente Minnelli starring Glenn Ford, Ingrid Thulin, Charles Boyer and Lee J. Cobb. Mainly set during the early years of World War II, after the fall of France, the story concerns two half-brothers with Argentinian roots, one a dilettante artist, the other a Nazi. Their paths fatally cross at a family gathering, causing the death of their grandfather who has a vision of the four horsemen of the apocalypse, foreshadowing the impending catastrophe of the war, which sees the artist joining the French resistance when he has a crisis of conscience after falling in love with the wife of a resistance leader, while his Nazi half-brother, now an official in the SS, becomes his enemy.

²⁰ *Undercurrent* (1946) is a film-noir directed by Vincente Minnelli and starring Katherine Hepburn, Robert Taylor and Robert Mitchum. The story concerns a scientist's daughter who becomes involved with and marries a rich and successful businessman but soon realizes that he has an obsessive hatred of his brother, who has mysteriously disappeared, but who she discovers has a sensitive poetic nature similar to her own that begins to intrigue and finally captivate her.

²¹ See what Deleuze calls "Bergson's second great scheme" in *The Time-Image*, p. 294, note 22.

²² Deleuze develops this path in *The Time-Image*, starting on page 78.

²³ Andrei Bely (1880-1934), whose real name was Boris Bugayev, was a Russian novelist and poet who was part of the symbolist movement and later an adherent of anthroposophy. His most famous work is the novel *Petersburg*, which concerns a young man who has been given a bomb and charged with the mission of assassinating his bureaucrat father but who is prone to what are often surrealistic perambulations and digressions. Vladimir Nabokov considered it the third greatest masterpiece of modern literature after Joyce's *Ulysses* and Kafka's "The Metamorphosis", pushing Proust's *Recherche* into fourth place.

²⁴ See Andrei Bely, *Petersburg*, (trans. David McDuff) Penguin Classics epub edition, 2011.

²⁵ See Henri Bergson, *Mind-Energy*, op. cit., Chapter 5, pp. 159-160 (translation modified). In a curious modification of the text, Deleuze elides Bergson's description of the two jets as being "symmetrical" ("*c'est qu'il se dédouble à tout instant, dans son jaillissement même, en deux jets symétriques*"), going on to substitute the opposite term "dissymmetrical" in his own recapitulation of the passage. See also *The Time-Image*, pp. 81-82, and p.295 note 23, where Deleuze explains these perspectives of Bergson.

²⁶ Deleuze describes this splitting with the same terms in *The Time-Image*, p. 82, and adds a diagram that Bergson "does not feel the need to draw", pp. 294-295, n. 23.

²⁷ See Bergson, *Mind-Energy*, op. cit., Chapter 5, p.165. Deleuze continues the paragraph in *The Time-Image*, p. 81. "For the present moment, always on the move, the elusive boundary between the immediate past that is already no longer and the immediate future that is not yet, would be reduced to a mere abstraction if it were not precisely the mobile mirror that ceaselessly reflects perception in recollection." (Translation modified)

²⁸ See *The Time-Image*, p. 69, where Deleuze quotes Bachelard from his *La Terre et les rêveries de la volonté*, Paris: Corti, 1948, p. 290.

²⁹ *Eve* (1962) is a film directed by Joseph Losey based on a novel by James Hadley Chase and starring Jeanne Moreau, Stanley Baker and Virna Lisi. The story concerns a writer whose novel is transformed into a hit film and whose success is threatened by his attraction to a capricious call girl (the Eve of the title), to whom he drunkenly confesses that the novel was actually written by his dead brother.

³⁰ *The Servant* (1963) is a film directed by Joseph Losey from a screenplay by Harold Pinter and starring Dirk Bogarde, James Fox, Sarah Miles and Wendy Craig. The story concerns an unscrupulous and resourceful young man who takes a job as the manservant of a rich but ingenuous and weak-willed upper-class Londoner and who, after insinuating into the house a girl he initially claims to be his sister, gradually turns the tables on his master who retreats into a drunken infantilism.

³¹ Regarding this subject and what follows see *The Time-Image*, pp. 69-70.

³² *The Lady from Shanghai* (1947) is a film directed by an uncredited Orson Welles and starring himself, Rita Hayworth and Everett Sloan. The story concerns an Irish sailor who, falling for a femme fatale, becomes involved in a byzantine plot to fake the death of her husband before being framed for his actual death. The film is remembered especially for its audacious finale featuring a shootout in a hall of mirrors.

³³ On this subject, see *The Time-Image*, pp. 68-69.

³⁴ See *Proust and Signs* (trans. Richard Howard), Minneapolis: University of Minnesota Press, 2000, p. 61.

³⁵ The works in question are: György Ligeti, *Concerto de chambre*, (1969); Olivier Messiaen, *Modes de valeur et d'intensité* (1949-1950); Elliott Carter, *A Mirror on Which to Dwell* (1975) and Pierre Boulez, *Éclats* (1965-1970). Besides these four, there is also Claude Debussy's *La Mer or Dialogue of the Wind and the Sea*. They were played during a 1976 IRCAM seminar at which Deleuze was invited to give a paper, "Making inaudible forces audible". See Edward Campbell, *Music After Deleuze*, London: Bloomsbury, 2013, pp. 101-102.