#### **Gilles Deleuze**

Leibniz and the Baroque, Principles and Freedom

Lecture 7, 20 January 1987, Principles and Freedom (2): Toward Incompossibility

### Augmented Translation and Transcription, Charles J. Stivale<sup>1</sup>

#### Part 1

We're going to start by going back into our earlier work, and then a bit of summary, and then we'll move forward. So a flashback: the more we move forward, the more something astounds me that, at the beginning, I had not sufficiently noticed. It's this famous text on monads which are without doors or windows, and this text has always been considered, or rather these texts since there are a lot of them, but notably this text *Monadology*, but there are a lot of them that return to this idea. Most of the other texts say: "without a hole", "without doors nor windows, without a hole." So what astounds me more and more, suddenly it seemed to me, in fact, that something hasn't been noticed, I say this for myself also because it came to me abruptly. I have been familiar with this text for a very long time, but there is still something quite striking. When one reads it, one says: obviously, what does this refer to? It doesn't refer to metaphysics; some treat it like it was a metaphysical proposition by Leibniz, an eminently paradoxical proposition: the monad is without doors or windows, that is, the subject is without doors or windows. But I am saying that here we should bolt upright, and each of us chastises ourselves for not having grasped it immediately: this refers to a very concrete kind of furnishing (*aménagement*).

And it's our departure point, and even our entire working topic for the year, it's the Baroque furnishing *par excellence*. A room without doors or windows! What makes this Baroque? You see, we're proceeding by... I'm undertaking this flashback, fine: we started from the idea that the Baroque is a fold within fold, it's the fold that extends to infinity, it's a fold within fold. Fine. Second determination, the Baroque is the room without doors or windows. I mean, what makes that, concretely, Baroque? I do understand that it's an ideal, there always must be a tiny hole, a little opening, but we speak ideally.

Consider Baroque architecture.<sup>2</sup> There is no need even to give examples because it's the constant presence of the Baroque, in Guarini, in Borromini, in Bernini, whatever you'd like. You always reach... So, really, without doors or windows, what does that evoke for us? Of what is it obviously the ideal? I'd say, it's the ideal at once of the cell, of the sacristy, of the chapel, of the theater, that is, all these sites where what is to be seen either focuses on the spirit (a monk's cell) or is within the room (the theater). And when I say "monk", "monk's cell", it's not by chance since the monk is the *monas*, it's the same word, monk and monad. But of course, neither the monk's cell nor the profane theater anticipated the Baroque. Certainly. On the other hand, what anticipates the Baroque is the constitution as architectural ideal of the room without doors or windows.

Concretely, what is the room without doors or windows? Concretely it's a camera obscura. The camera obscura did not anticipate the Baroque either, but the fact remains that in the Baroque age, the camera obscura takes on a determinant importance in all the arts. It's a camera obscura in the detail of its mechanism that you will find, for example, in Sarah Kofman's book, Camera obscura,<sup>3</sup> which has the advantage, I'm citing this book because in its appendix, one finds an eighteenth-century text which describes in detail, very precious for us, an eighteenth-century description of the camera obscura. You see that it's a little room in which the individual, for example the painter, is introduced, and he is going to receive light through a cylindrical opening from above. So there is indeed an opening, but this opening is regulated, or what enters through this opening, the light coming in through this opening is regulated by an interplay of tilting mirrors. And depending on the position that the painter wants to give to his painting in relation to the object models that are projected through the mirror, whether he wants a perpendicular or parallel or oblique position of the painting, there will be an entire play of angling of the mirrors. You also recognize the Leibnizian theme of the monad-mirror of the city, and here as well, it's quite astonishing that the comparison hasn't been made, the confrontation with the camera obscura, when he tells us: monad, mirror of the city. It's precisely the camera obscura. And it's essential that in the Baroque age, the camera obscura will be the object of systematic use for certain painters, for example, Caravaggio. [Pause]

Let's continue. The camera obscura, the sacristy. There is a sacristy in Rome that, literally, contains only a miniscule entry. All the rest is – with a great Baroque technique – all the rest is in trompe-l'oeil. The windows are in trompe-l'oeil, the ceiling is painted in trompe-l'oeil, etc. The use of trompe-l'oeil in the Baroque era causes no problems for since it's precisely the monad without doors or windows. The chapel of the Shroud of Turin, how is it described, even in the tourist guides? I don't know [that] it's described like that, but it doesn't matter; the chapel is notoriously described like this: it is completely in black marble. You recall the importance of marble in the Baroque era, since yet again, marble is veined. The chapel is entirely in black marble, it is very, very dark, and it truly contains a minimum of openings, and still the ideal of these openings is that one sees nothing through them. Everything to be seen remains inside, everything to be seen. But since it is dark, it's almost not even what's to be seen, but what's to be read. You'll tell me that to read, one needs light; ok, yes, one needs light, but purely as a physical condition. Reading is an operation of the mind, reading is a perception of the mind, it's the Reading Room. And the monad reads the world much more than it sees it. We saw previously the whole metaphor, or rather, the whole passage from seeing to reading in Leibniz.

Fine, I'd say, the interior without doors or windows is really... One of you was reading to me, about the Baroque, this monastic architectural theme of the cell without doors or windows, where this theme of the sacristy took off, and that it's no doubt one of the Baroque contributions to architecture. One of you was reading to me something well-known from Le Corbusier, who analyzed it very well, the Abbey of La Tourette, near Lyon, where the chapel, he explained it quite well – if the reader is here, he can add something if he wants – the chapel, at the extreme, is without doors or windows. It's the room that realizes, literally, quite literally, the formula: "an interior," at the extreme, an interior without exterior. So, of course, there are openings, but openings so well bent, so oblique, in the work of Le Corbusier, that light passes through openings, but one sees nothing from the outside, with uniquely a light passing colored by elements from within. As a result, these openings themselves offer nothing to be seen outside,

whether these be openings from above, or lateral openings. I don't mean that this abbey by Le Corbusier is Baroque, just that such an enterprise would not have existed without Baroque architecture. You see, in the end, how all sorts of techniques manipulated by the Baroque, like trompe-l'oeil, or the transformative décor in theaters, must be understood starting from this ideal of interiority. Interiority without doors or windows: this means that all there is to see is inside. And if what there is to see is inside, well then, all that is there is to be seen is to be read.

But finally, what is the correlative of this interior without doors or windows? The correlative of this interior is an exterior that contains doors and windows, but precisely, and this is the Baroque paradox, it does not correspond to an interior. What is this? It's the *façade*, the façade is pierced with doors and windows. However, the façade no longer expresses the interior. Our last definition of the Baroque, for the moment, is to be: the façade achieves independence at the same time as the interior conquers its autonomy. About the correspondence façade and interior, for example, one could say that, in a certain way, the Renaissance architecture implies this correspondence of interior and exterior, and from the façade and the interior is substituted a tension between the façade pierced by doors and windows and the interior ideally without doors or windows. [It's] as if these two elements had conquered, for one, independence, the independence of the façade in relation to the interior, and for the other, autonomy, the autonomy of the interior in relation to the façade. [*Interruption of the recording, small gap in the recording, text by WebDeleuze*] [16:04]

That does not prevent there being a relation required, and the relation will no longer be that of correspondence, or then one would have to conceive of correspondences of a new type, such that we find ourselves with a new characterization of the Baroque: the tension between interior and exterior, [*End of recording gap*] taking into account their respective, reciprocal independence.

In this sense, for example, a literary critique like Jean Rousset, who wrote a lot about Baroque literature, I believe, saw something quite well, when the second book that he devotes – but strangely, this second book is a bit like his farewell to the Baroque, in which he there has doubts about the notion of the Baroque. But this second book, although he may have doubts, he calls it quite well *The Interior and the Exterior.*<sup>4</sup> In the first book by Rousset, called *Literature of the Baroque Age in France*,<sup>5</sup> he wonders in the final part, but what is the Baroque? And he begins by saying quite well: it's the independence of the façade. And then he passes to another point: he says, because and since the façade is independent, that is, no longer expresses the interior, then henceforth the Baroque will constitute an exploded interior (*intérieur éclaté*).

There it seems to me that it no longer works, and he gives an example of the exploded interior: there is a decorative overload. That no longer works: I mean, he's at once quite right, it's all very complex, [but] it's not at all an exploded interior, and the decorative aspect, even in pseudo-overload, this is not at all an explosion. There is necessarily decoration that will appear excessive from a certain point of view because the interior has no doors or windows, so it is not at all an exploded interior, an interior gathered into itself. As a result, Rousset is all the more correct when he marks this tension between interior and exterior, between the façade and the interior. And precisely by reading [Heinrich] Wölfflin, we find a sentence that appears decisive for me, page 78 of the French translation [of *Renaissance et Baroque*]: "It's precisely this contrast between the exacerbated language of the façade and the serene peace of the interior

that constitutes one of the most power effects that Baroque art exerts over us."<sup>6</sup> This cannot be expressed better, tension between the newly independent façade from the interior, and the now autonomous interior in relation to the façade. Fine.

So, there is no longer a correspondence, but in what sense? Once again, what is the relation going to be? What is the relation going to be between the independent façade and the autonomous interior? This will be the great problem of the Baroque. I am saying the tension between the façade -- that's why I insisted on this flashback -- I am saying the tension between the façade and the interior can only be resolved, in the sense in which one speaks about resolving tension, can only be resolved by the distinction between floors. This is why the articulation between two floors in the Baroque will be substituted for the distinction between two worlds. The interior will be linked to the upper floor, whereas the façade will occupy the entire lower floor. It's the articulation of the two floors, that is, the fold between two floors, it's the articulation between two floors that will make possible a new mode of correspondence between the independent façade and the autonomous interior, or if you prefer, what there is to see from the outside, for the façade is a view from the outside since it has no interiority, between what there is to see from outside and what there is to read from the inside.

The upper floor is a reading room, the trompe-l'œil, whatever you like; it's about reading, the camera obscura, it's the reading room. So the Baroque unity will once again be what one sees from outside the lower floor, what one reads from within the upper floor. But is there a reading-seeing unity, a reading-vision unity? Is there a bloc, are there blocs of reading-vision? Yes, today one would say that a bloc of reading-vision is the comic strip. Good. But that exists in the Baroque era. The Baroque era, it's well known, is the emblematic age *par excellence*. But what is an emblem in the theory of signs? An emblem is a reading-vision bloc. For example, a heraldic emblem is what? A motto or device (*devise*) and a figure; the *devise*-figure unity is as old as the world. Why does the Baroque develop these cycles of emblems? Why does the emblem in the Baroque era undergo such a development?

I am nearly developing a thematic consolidation: what is the Baroque? In his book on the Baroque, on drama and the Baroque, what does Walter Benjamin tell us?<sup>7</sup> He tells us: what has been poorly understood is what allegory was, because it was judged in the name of a value judgment, seeking to make the allegory into a bad symbol. But he says, no, that allegory is something differing in nature from the symbol. One needs to oppose allegory to symbol. Good. It matters little how he defines allegory in his text. It's not at all to have you... It's for each of us... Well, I'm not able to really get back into this text... but some among you will surely get into it, it's a beautiful text; it matters little how he defined it. What I retain is the difference in the symbol-allegory nature. Why? Because I would say, in my own perspective and in the simplest way, the symbol is a direct correspondence between an interior and an exterior. Allegory presupposes rupture, the disjunction of interior and exterior. The exterior is given to be seen in a figure, the interior is given to be read in characters, and the correspondence is no longer direct. [*Pause*]

So what is a correspondence that would no longer be direct? This will be Leibniz's entire problem. To determine indirect correspondence between levels, that is, between floors. It's what he will call harmony. [*Pause*] That allegory henceforth fills the Baroque world as synthesis of

visible figures and readable characters; this is entirely necessary! This is what I wanted to tell you. Do you see any points to add?

#### A student: [Question on architecture]

Deleuze: For architecture, this seems obvious to me. We started off, if you will, from the definition of folds, the fold that goes to infinity, but from this definition, we passed on to the second definition, the exterior becoming independent from an interior [that] becomes autonomous. The "without doors or windows". And the fold is really what passed between the two, between the façade and the interior, henceforth what articulates the two floors since, once again, the tension of the façade and the interior can only be resolved by the distinction between floors. That's what I wanted to insist on. Any problems? Everything ok? No, yes? Huh? Yeah?

A woman student: Something bothers me a bit. The camera obscura, in principle, serves to project what one sees onto axes, whereas in fact, if it's projected on a sphere, on a curve, this use of the camera obscura would seem to be in apparent contradiction with what you said about the use of curves in the Baroque.

Deleuze: Yes, yes, yes. It's not on the same level, you understand? One must not seek to reduce everything, because in Leibniz's texts, there are constantly rectilinear procedures, one must not seek to... How am I going to have you grasp this? -- For example, if you take a figure like a triangle, it is obviously rectilinear. For Leibniz, or for Baroque mathematicians, we mustn't believe that that [the Baroque] implies that there is no straight line, or that there are no rectilinear figures, or that there are no rectilinear structures. I believe that all that the Baroque asks is that rectilinear mechanism. This is of no importance; what matters is that, at another level of physics, the curve will be primary in relation to all the straight lines. But that does not presume that one avoids all straight lines. Moreover, when I told you... You see well what occurred with an inflection in the Baroque, it serves to hide a right angle. All you can say is that the inflection manages to round off the angle, but the angle is there. [*First gap in the WebDeleuze transcript*]

Just as in Leibniz's work, in the end, all that Leibniz will ask of you, in the end, is not the disappearance of rectilinear structures, or angular structures, or hard angles. It's the perpetual passage, thus harmony, that is, the indirect correspondence between rectilinear structures and curvilinear structures, once it's stated and understood that what comes first is the curvature. If you will, what is first here is a bit like Descartes's case. For example, Descartes is all that you wish except Baroque, it seems to me. That he privileges rectilinear structures does not preclude that all of Descartes's physics is a physics of the whirlwind (*tourbillon*). It's simply a matter of knowing how he engenders whirlwinds. From the other point of view, that Leibniz creates a physics of curvatures, in the wake of [Christiaan] Huygens, does not at all keep him from perpetually passing into rectilinear structures. It's simply that, for him, the whirlwind is absolutely primary. This will be primary because nature is fluid, because bodies are elastic, etc. There will perpetually be... For example, hardness [*Deleuze writes on the board*] will be a case of elasticity. So this will not at all be due to ignorance about hard angles, once we state that there are hard bodies, hard angles as there are hard bodies. All of this will be reintegrated into a physics that will present itself as first being a physics of hard bodies. [*Pause*]

A woman student: [Inaudible question concerning the right angle] [End of first gap]

Deleuze: He [*Leibniz*] says it all the time in the methods of limit; he says it all the time. We can even conceive of the curve, in fact, as the limit of a series of right angles. [*Second WebDeleuze transcript gap*] We nearly saw it with objects, with the possibility of perpetually reproducing an angle along the side. So there you are. [*End of transcript gap* 2]

Second point [*Start of third WebDeleuze gap*] So, at our last meeting, we moved forward somewhat; I tried to catch up for some lost time, and so I'd like just to sum up a bit. I am saying, we saw several things.

The first point: what is sufficient reason? And I am summarizing: sufficient reason – this picks up precisely about the principle of sufficient reason. I am saying, never forget that in Leibniz's formulation – this is what's important for me – it's a principle that reigns over *events*. This topic of the event is fundamental. "Everything that happens has a reason", and I believe that one really must place weight on Leibniz words, *what happens*. All of Leibniz's logic is a logic of events. And how is this useful for us? Because the event is the inflection. What occurs is an inflection.

And you recall that all of our analyses led us from the inflection to inclusion. Inflection is necessarily included. It's included in what? In a notion, the notion of the subject. The subject of what? The notion of the subject to which what happens, happens; to whom what happens, happens. So, something happens to something. What happens to something is included in the notion of this thing. We go from the inflection of the event to inclusion. In other words, the event is predicate of the subject; that's what sufficient reason is: the event is predicate of the subject. That means [that] what happens is included in the notion of that to which something happens. If I say, I fly, I die, I cross the Rubicon, etc., these are events. Their reason is inclusion of these events in my notion. That's what we have as first point. Thus, we went from inflection to inclusion. [*End of transcript gap 3*]

Second point: We were henceforth going to be led toward distinguishing all sorts of types of inclusion according to the propositions considered. And first, [among] the great duality of propositions, it was the propositions of essence and the propositions of existence. Proposition of essence: two and two make four; proposition of existence: Caesar crosses the Rubicon, or Adam sins, Adam sinned. [Pause] We will call "analysis" the operation that shows an inclusion. If I show that a given predicate is contained in a notion, I do the analysis. Can the distinction between two types of propositions, proposition of essence of the "2 + 2 make 4" kind, and proposition of existence of the "Caesar has crossed the Rubicon" [kind], be presented in the following way: in the case of propositions of essence, the analysis is finite, that is, we show by a sequence of finite operations that the predicate is included in the subject, and in the case of propositions of existence, the analysis is indefinite? Answer: No, this is the first contradiction that would be altogether unfortunate. Why? Because in the propositions of essence, the analysis cannot be finite whatever one might say since the propositions of essence are – and essentially concern - the deepest levels of the understanding of God. For God is infinite and is only concerned with the infinite. Propositions of essence cannot be susceptible to a finite analysis, whatever one might say. And even if Leibniz seems to say so, it's simply not possible! Not possible. Even if he says so, he cannot say it. Even he says it, it's just a way of speaking. On the

other hand, propositions of existence cannot be indefinite. Why? Because even for God, the resolution of the predicate in the subject is infinite. And there, Leibniz says it formally: God himself does not see the end of the resolution since there is no end. The inclusion of the predicate in the subject implies an infinite analysis. So, in both cases, I believe that the analysis is necessarily infinite. Fine.

Given all this, we envisage the case – and I am retracing our path from the last time; I would just like this to be clear -- we envisage the case of propositions of essence, of the 2 + 2 make 4 type. What does inclusion consist of?<sup>8</sup> Here this is extremely important, because this is a web of contradictions, it seems to me, so I beg you both for your good will and your attention. In the end, if... I don't know... I have to convince you, but it's up to you to see if you are convinced or not.

First type of inclusion in the proposition of essence is reciprocal inclusions. What a reciprocal inclusion is, for Leibniz, is very precise: it's the relation of a definite and its definition, provided that the definition is real. What a real definition is -- and this we must know by heart -- a real definition is a definition that shows the possibility of the defined. It is opposed to the nominal definition, which is a definition that allows one to recognize the defined but does not show its possibility. An example of a real definition: you define 3 by 2 plus 1. Why is this real definition? It's real definition because it is a definition by primary factors, by primary numbers. [*Pause*] Between a defined and a real definition, there is a reciprocal inclusion, that is, you can substitute one for the other.

If you link up real definitions, you create a demonstration, and by pursuing that, you reach what Leibniz calls Identicals. What are Identicals? These are the final terms of analysis. However, I have just said that there is no final term. That is not a contradiction; these final terms are themselves necessarily infinite. Thus it's only a way of speaking, "final term"; these are infinite terms by themselves, that is, these are absolutely simple terms which henceforth have absolutely nothing to do with one another. This is what Leibniz calls *absolutely simple primitive notions*. What are absolutely simple primitive notions? I will give you the Leibnizian response: these are forms directly able to be raised to infinity. An example – each time we will test this – can one think of an infinite speed? If so, if one can think of an infinite speed, speed will be an absolutely simple notion. Can one think of an infinitely white white? If so, white is in this case. No, realistically we cannot, and it matters little why, we cannot think of an infinite white. White is always a degree of white. We cannot think an infinite color, let us assume. Can one think of an infinite extension (*étendue infinie*)? Yes, Descartes says, for example. Leibniz, perhaps, would say no. Directly. Can one think of an infinite extension by itself, directly infinite? Perhaps not. Ok.

What can one think of as infinite? Can one think of an infinite understanding? According to Leibniz, yes, but all that matters little. Whether I reach such forms or not, that's something else entirely. Whether I reach such forms or not, I will call absolutely simple notions as infinite forms, directly infinite forms. I would say that here, these are no longer reciprocal inclusions since each has nothing to do except with itself.

Two absolutely simple notions have no relation with one another. They are, as Leibniz says, *disparates*. These are Identicals, not in the sense of identical to one another. Each is identical to self. In fact, it refers only to itself. This is no longer in the domain of reciprocal inclusions, but in the domain of auto-inclusions. An Identical is an auto-inclusion. It is the Identical to self. Thus, each absolutely very simple notion is an Identical to self, an auto-inclusion. The absolutely simple primitive notions are diverse, that is, without any relation with one another, and Leibniz's paradoxical reasoning – I had tried to explain it the last time, this being why he derives from it a new proof of God's existence – is precisely because infinite forms, absolutely simple notions have nothing at all to do with each other, they can belong to a same Being; for contradicting itself would still have some relation with something. They can belong to a same being all the more so since they have nothing to with one another.

I see this same reasoning in Spinoza, truly a mode of reasoning in the air at this era. It's because thought and the extension (*l'étendue*) strictly have nothing to do with each other that both can be attributes of God. That is, they can be the attributes of a single and same Being. Thus, auto-inclusion of primitive forms allows one to conclude about the singular existence of an infinite being which, henceforth, possesses every infinite form. In other words, if you will, one must say: absolutely simple forms or infinite primitive forms are formally distinct but ontologically are One. This is the new proof of God's existence, formally distinct but ontologically One. Good.

Thus, in principle, we follow the reciprocal inclusions back to auto-inclusions, that is, we follow definitions back to Identicals, the Identicals being undefinable since they only contain self, since each contains only itself. So there, this is the object of what Leibniz calls the Combinatory (*Combinatoire*). One is supposed to start from simple notions to arrive at composites.<sup>9</sup>

But for us, once again, for us, since we do not reach absolutely simple notions which are the basis of God's understanding; we are finite creatures and don't get there, and this has no importance. It is unimportant that we don't get there because we will be happy with relatively simple notions. And what are relatively simple notions which, henceforth, you sense, symbolize with absolute simples? Relatively simple notions are what? This is what Leibniz calls the *requisites* of a domain. The requisites of a domain are the real definition of objects of a given category. The requisites are relatively simple notions that we reach.

An example: I take a domain which is the discontinuous quantity or number, and I say: what is the requisite of the domain? And Leibniz's response is: it's primary numbers. Primary numbers are the requisites of any number. But you will tell me that primary numbers are numbers. For Leibniz, yes and no. They are very singular numbers, numbers that are the requisites of any number.

I select another domain, the organism. What is the requisite of forces of a very particular type that I can define, or that Leibniz defined with the lovely name of plastic forces? We have seen quite rapidly what plastic forces consisted of. These are forces that have the power of enveloping infinitely and of developing parts of an organism, of enrolling and unrolling parts of an organism. It's plastic forces that will define life. If I take the domain of inanimate matter, of inorganic matter, this time the requisites will be elastic forces, by virtue of which all bodies are elastic. Each time, and for each domain, I attain requisites that are relatively simple.

From this I conclude this new point: Leibniz tells us that the predicate is included in the subject, agreed! But what I am going to say is very, very unclear because I still do not have the elements to say it clearly. It's only to help you sense the problem. Yet again, 2 and 2 are 4. You recall this from our last meeting; I won't go back over it. I read to you the way in which Leibniz demonstrated it in the *New Essays*, he demonstrates it very well, grant him that. He demonstrates precisely by decomposition within primary factors. I say: where is the inclusion in 2 and 2 are 4? It's not where one thinks it is. In fact and that explains, it seems to me, the extent to which Leibniz has been poorly understood, that is, the objections made against him stem from this. Some have wanted to place inclusion there where Leibniz never wanted to place it since Leibniz does not say that 4 would be in 2 and 2, nor that 2 and 2 would be in 4. So where is the inclusion? Why? Understand, it's that 2 and 2 are 4, one must write it, as always in Leibniz, with an exclamation point : it's an event. This is idiotic. When one agrees to give importance to the notion of event in Leibniz, one tends to reserve it for propositions of existence, but that is wrong! [It's] for propositions of essence as well. There are only events in Leibniz.

Before Leibniz, there was a first great philosophy of the event, the Stoics, we shall see. There were none previously. It's already a creative act in philosophy to tell oneself: well, well, I am going to make a concept out of the event. Aristotle can speak of the event, but for him, it is not a concept; it's a very derived notion that depends on Aristotle's concepts, but to take the event as the object of an irreducible concept, that is truly a stroke of genius. In the end, philosophy constantly occurs with strokes of genius like that, where suddenly something is constructed into the state of concept. The concept of the event is signed by the Stoics. Following that, it collapses; a concept has a very discontinuous history. The second great philosophy that will extend the problem of the event and a concept of event is Leibniz. The third will be — and the hour will come for us! -- The third will be Whitehead. This is fine, three great philosophers for one concept, that's enough. [*Laughter*]

So, I say: 2 and 2 are 4! Understand that this is what the event or the predicate is, so much so that one must not say that "2 and 2" is the subject and 4 is the predicate. When one says that, we really see that it is false. [Bertrand] Russell, who wrote an admirable book on Leibniz, at the same time he reveals a kind of radical incomprehension, but that's Russell so it's not serious, because an error from Russell is worth a thousand truths from some jerk (*connard*). [*Laughter*] Russell obviously is going to say: you certainly see that it is false that all judgment is a judgment of inclusion; 2 and 2 are 4, you cannot work out an inclusion.<sup>10</sup> Obviously. He would prefer that, according to Leibniz, either 2 and 2 are in 4, or that 4 is in 2 and 2. [*Start of third WebDeleuze transcript gap*] Well, that's not it; it's not at all right. 2 and 2 are 4: it's the event, that is, the predicate. So you will tell me, where is the subject? Well then, the subject, it's primary factors. And what are the primary factors? [*End of transcript gap* 4] 1, 2, and 3. In fact, to demonstrate that 2 and 2 are 4 is the linkage of three definitions, these three definitions mobilize what terms? 1, 2, 3. I would say that 2 and 2 are 4 is the predicate that refers to the subject 1, 2, 3.

So, that goes all wrong, and why? Because – this amounts to my having said: the predicate is the same thing as the event or the relation. We are far from those who say that Leibniz cannot take into account rapports or relations. Why? It seems to me that what Leibniz calls the predicate is precisely what we are calling a rapport, it's precisely what we are calling a relation. So, where

does the source of confusion come from? We will see this later. I am trying to bring my topic to a close, and especially since everything is happening at once.

I say 2 and 2 are 4 is an aggregate of relations, and what Leibniz calls a predicate. To what is it attributed? It's attributed to requisites, it comes from requisites, it is included in requisites. What are requisites? They are the three primary numbers mobilized by the definitions 1, 2, and 3. 2 and 2 are 4 are in 1, 2, and 3. But you are going to tell me that all this is one big joke since, again one has to think 1, 2 and 3, together. And if you think 1, 2, and 3 together, you have already given yourself over to relations, and a relation cannot be a subject of other relations, so all that is a joke, it's not reasonable, it's not serious. [*Pause*] And yet it is!

I pass on to propositions of existence. "Caesar crosses the Rubicon," you do not see that it's a relation. I say: the predicate is contained in the subject, in the notion of the subject. Yes, but the predicate is the very relation, it is included in the subject "Caesar." Fine. But you will tell me, the subject "Caesar," at least him, he is all alone, it's one subject. Whereas 1, 2, and 3, there are three. Well no, the subject "Caesar," he is no longer all alone since the subject "Caesar," but by the subject "Caesar," but by the subject "Caesar," but by the subject "Adam," the subject "Alexander," the subject "Nero," the subject you, me, etc.

In other words, one must distinguish two planes: you can think terms distributively, that is, you think them together and each one for its own account. There is still no relation. If we do not make this distinction, it seems to me then that everything crashes. That's why, for Leibniz, it will not suffice to say: I think terms together so that there would be any relations between them; you can think them together, but each one for its own account, as distributive unities. You think 1, 2, 3, but each for its own account; together, and for its own account, you think the monad "Caesar" and the monad "Cicero" together, but each one for its own account, as sufficient unities.

At a second level, you say: "Caesar crosses the Rubicon," and there occurs a relation between the monad "Caesar" and the monad "Cicero" since Cicero is going to be quite vexed by Caesar doing that. [*Start of fifth transcript gap at WebDeleuze*] At a first level, you think 1, 2, 3, each on its own. But when you say 2 plus 2 equals 4, here there are relations between 1, 2, and 3. [*End of WebDeleuze transcript gap 5*] As a result, for the question, from where do relations arise in Leibniz, a question posed by all logicians, it seems to me quite simple. There is no problem. There is no problem. Relations are predicates. [*Second YouTube & BNF gap*, 1:02:37]

# Part 2

Once something is predicated, is there emergence of the relation? Far from the relation and the predicate being opposed, as Russell thought, the relation is the predicate. [*End of YouTube gap*] Once something is posed as a predicate, the relation is born. What is a predicate? Relations, that is, events. You will tell me that this isn't clear: how is it that relations and events are the same thing? We will see later – This is difficult. We would have to be able to say it all at once, this would be... Fine. -- Thus, it's very important, in fact. I can say 2 and 2 are 4! is the aggregate of relations, it's an aggregate of relations which is the predicate of 1, 2, 3, taken as a distributive unity. There is no relation except at the same time, and by and in the predicate since the relation is the predicate.

So here is the system of three types of inclusion relative to truths of essence: auto-inclusions or Identicals, reciprocal inclusions or definitions, non-reciprocal inclusions or requisites. With that, one has given the logic of essence.

We pass on to the logic of existence, that is, the propositions of existence. Here this will, we've seen this...This will be the great problem: what is the type of relation between two notions, according to Leibniz? It is no longer a question of simple notions of the type either absolutely simple primitive notion, or the requisite, that is, the relatively simple notion. It is a question of individual notions. They are simple as well, but of an entirely different type. These are notions of the individual. I would say the proper name notions: Caesar, you, me, etc. And here there is inclusion as well.<sup>11</sup> Why? This time, I would say – and it's what I proposed as the term: a fourth type of inclusion, these are non-localizable inclusions. Why? Because an individual notion does not include a predicate without including the aggregate of the world. The inclusion is therefore non-localizable. What does that mean? If there is a predicate that my notion includes, it is: what I am doing at this moment. That tells us the extent to which it is not at all a question of attributes, but a question of events.<sup>12</sup>

When Leibniz wants to show what an inclusion consists of in an individual notion, he says: what am I doing right now? And the answer is: *Monadology*, "I write" (*j'écris*). But it's enough to read Leibniz's texts to realize that there is something very odd. "I write" is what? Don't tell me that it's an attribute! It's a verb. What does Leibniz call a predicate? What he calls a predicate is a verb, "I write". But Leibniz says: if the verb "I write" or the predicate "I write," "Caesar crosses the Rubicon," is a verb, it's an event. The verb is the event index (*indice d'événement*). Predicates are verbs. If you do not grasp that, it seems to me, then all Leibniz collapses, and collapses, in fact, in a jumble of contradictions, quite horrible (*quelle horreur*).

"I write", "I die," "I sin," "I commit a sin," all these are verbs. Simply in the Letters to Arnauld, when he wants to give the example of inclusion of the predicate in the subject, what does he give? "I take a trip," "I go from France to Germany." That's what Leibniz says. "I go from France to Germany"; it's rather odd, however, on this point, when studies on Leibniz have been presented, he is purported to have said: inclusion of the predicate means that the judgment of existence is: name of a subject + copula (verb to be) + qualifying adjective. I swear to you that he never ever said that! He would have said it if he had wanted to. He says: "I write," "Caesar has crossed the Rubicon," "Adam sinned," "I take a trip," in other words, one has to listen to him: predicates are verbs, not attributes, not adjectives. They are verbs, and the verb is the character of an event.

Any monad that includes whatever (*quoi que ce soit*) necessarily includes the entire world. This is for a simple reason that would quite correctly not work on the level of attributes. It's because every event has a cause: if I write, it's for this or that reason. I write to my cousin: "My dear *cousine*, how are you doing?", there is a reason for this, or rather there is a cause: I heard someone say that she wasn't well. There is a cause for this cause, then there is a cause for this cause for this cause, etc. So I do not include any old verb without including the infinite series of causes that are equally verbs. In other words, causality is the relation of a verb to another verb. This will be the link of verbs, or the link of events between each other. That's what causality is. It is entirely necessary that inclusion not be localizable, that is, I include anything whatever; that

is, if I include an event that concerns me in the moment, "I write," I include in this very way the totality of the world, from one cause to another cause. In the end, all verbs are linked to one another. Fine.

So, let's take advantage of this [topic] to deal with this point. Some act as if the theory of inclusion in Leibniz implied a reduction of judgment to the judgment of attribution, and this is Russell's great theme, in his book on Leibniz. On this, Russell himself says: obviously this will be embarrassing (*embêtant*) for Leibniz because as a mathematician and a logician, Leibniz knows quite well that there are relations, and that relations are not attributes. Let us suppose that "the sky is blue," and that "blue" would be an attribute, and this is not even certain; on the other hand, 2 and 2 are 4, this isn't an attribute, there is no attribute in this. Or again, "Caesar crosses the Rubicon," this is not an attribute, unless by translating it: is a being crossing (*est franchissant*) the Rubicon, unless by translating "I write" by: I am a writing being (*je suis écrivant; [using present participles]*). We see clearly that this is not the same thing, that these are forced reductions.

So Russell adds: Leibniz is going to be embarrassed because his theory of inclusion leads him to reduce all judgment to the judgment of attribution. But as a mathematician and a logician, he is the first to know that mathematics and logic are systems of relations that are irreducible to attributes. So he is required to find a status for the relation. What will really trouble him, so Russell says. And in the end, he will say of the relation: the attribute of the subject which compares things. This has to be a joke, because Leibniz never, ever did that. Russell does not conceive that Leibniz could do otherwise since... But everything is wrong from the start. What has been muddled is the inclusion of predicate and attribution, whereas that has no bearing whatsoever. In other words, what Russell confused, something very serious for a logician, is predication and attribution.<sup>13</sup>

Attribution is precisely the rapport between a subject and an attribute, that is, a quality, through the intermediary of the copula to be, for example, the sky is blue. This is what we call a judgment of attribution. From the viewpoint of the judgment of attribution, but indeed from the viewpoint of attribution, the predicate is the attribute. Such that a judgment of attribution will present itself in the form: a subject, the copula to be, the predicate which is an attribute. But the predicate is only an attribute from the viewpoint of the subject of attribution. If a judgment is not of attribution, it nonetheless perfectly has a predicate. The predicate is what is said. This isn't difficult. It's what is said. 2 and 2 are 4 is a predicate. About this, logicians say: but no, it isn't a predicate since there is no subject. They are idiots. [*Laughter*] It's not enough not to find a subject in order for there not to be one! If we ask what is the subject of "2 and 2 are 4", it's 1, 2, and 3. There you have it. "2 and 2 are 4" is the rapport that is said of 1, 2, and 3, considered as without rapports have a predicate which is the rapport "2 and 2 are 4". But predicate does not mean attribute; it means: what is said about something. For Leibniz, the predicate is an event. Judgment is not a judgment of attribution; predication is: saying an event of a subject.

Letters to Arnauld: in one letter to Arnauld, I'll read the small part of the sentence that interests me. Arnauld asks what precisely all this to-do about inclusion means, inclusion of the predicate in the subject. I pull out this little sentence. You must learn it by heart, into your heart, to prevent

yourself falling from into any contradiction. The individual notion – that is, Caesar, or you, or me -- encloses -- he could say the attribute; no, he does not at all say attribute, ever! Well, yes, at times he says *attributum*, but that doesn't matter, because it's at that moment the synonym of predicate. One must say the attribute is the event, but that changes nothing – he says: "the individual notion encloses that which refers to existence and to time." What does that mean: "that which refers to existence and to time"? It's the predicate. That which refers to existence and time is said of a subject. But that which refers to existence and time, it's not an attribute; in the strict sense of the word attribute, it's not an attribute. What is it? It's an event. It's even a perfect definition of the event, only nominal; that does not show how an event is possible. It's a very good nominal definition of the event to say: the event is that which refers to existence and to time. In this sense, there is no event without rapports. The event is always a rapport, it is not only a rapport with existence and time, but it is a rapport to existence and to time.

So, above all, do not believe that predication in Leibniz could be reduced, as Russell believes, to an attribution. If this were the case, Leibniz would indeed slide into all the contradictions you might want. But far from being an attribute, the predicate is the relation or the event, that is, the relation to existence and to time in the case of propositions of existence. And here, this is close to the Stoics.

There is a precedent, there is a precedent, as I was telling you, in the new logic of the Stoics that, alas, we know so poorly, of which we have only miserable fragments from the ancient Stoics, alas. It is not a sacrilege to say: we could have done with a bit less of Plato and a bit more of the Stoics as things fell out randomly. [*Laughter*] Well, one mustn't say things like that; we must be content with what we have, but, you understand, our hierarchy of ancient thought is very much linked to: we make do with what we have given all that has been lost; we really just don't realize. Very little remains for us, but what little does remain, especially ironically thanks to commentators, those that have remained, the commentators [who] selected from Antiquity, we see quite well the new logic that they [the Stoics] were undertaking, and the terms in which they broke with Aristotle. The judgment of attribution, in fact, we can say that it derives from the tradition – here I don't want to get mixed up with Aristotle, we would never at all complete [our work] – but I can say summarily that it derives directly from the Aristotelian tradition: Subject + verb to be + quality. This is the judgment of attribution.

But the great rupture of the Stoics is to say: no, the event, the world is made of events, and events do not synch with this schema. What is the predicate of a proposition? It is not the quality attributable to a subject; it's the event, the event stated in a proposition. The event, of the type: "The sun is coming up (*Il fait jour*)"! And the link between two events creates the true object of logic, of the kind: "If the sun is coming up, it's bright out", the linkage of events between themselves. The dialectic will be defined by the Stoics as the link of events between themselves. Events are predicates in judgment, in the proposition.

Hence there follows a logic of an entirely different kind than Aristotelian logic, with an entirely different set of problems. For example: what does a proposition tending toward the future mean? A future event? A naval battle will occur tomorrow. Does this proposition have a sense, has it no sense? In what way does it have sense? What sense does it have? And when the naval battle has taken place, then has the proposition changed modality? Can a proposition henceforth change

modality with time? [There are] all sorts of problems, that which have a rapport with existence and with time. In other words, as they say, the event is the expressible of the proposition. The predicate or the event is the expressible of the proposition.

You see, once again, I insist on this because it's the fundamental contradiction: the inclusion of the predicate in the subject in Leibniz, once it's accepted that in this – right, I am nonetheless beginning my transition -- Leibniz is going to take up, is going to be inspired by this logic of the event, and he is going to provide an entirely new orientation to this logic. In what form? In the form (which wasn't at all Stoic, this one): events or predicates or relations, all of this is the same, events are included in the individual notion of that to which they happen. That is Leibniz's fundamental contribution to a logic of the event. The event is included in the individual notion of that to which it happens, or of those to which they occur. Fine

Difficult? No, not difficult, to the contrary, it's quite clear. You see that the inclusion of the predicate in the subject for Leibniz is a fundamental step in a theory of the event which has nothing to do with a theory of attribution and of the judgment of attribution. There you have what was enormously important to me, what I absolutely wanted to say since, once again, no text by Leibniz that I know of authorizes the reduction of judgment or of the proposition, according to Leibniz, to a judgment of attribution. You understand?

Something very important results from this: it's that, in the correspondence with Arnauld, there is a passage where Leibniz – you know, Leibniz had quite a lot of bad faith with his correspondents, but it's normal, it's quite legitimate – Arnauld tells him at one moment in their exchange of letters -- Arnauld is very clever; sometimes he is very intelligent -- he says to Leibniz: but you know, your whole thing rests on your giving an absolutely new definition of substance, so if one defines substance as you do, obviously you are correct in advance. But is that good? And here, Leibniz is going to undertake some exercises of high acrobatics: not at all! What I am saying isn't at all new. What does it consist of? Arnauld tells him: you define substance by its unity; and in the end, what you call substance is simply a unity. In fact, the *Monas*, we saw, [is] unity. Here Leibniz immediately responds and says: you are really telling me something quite strange, that it's surprising to define substance by unity, but everyone has always done that. Arnauld ends up saying: ok, everyone has perhaps done that. He is not entirely convinced. He is entirely right not to be convinced. All this, he throws onto Descartes because Descartes does not at all define substance by unity; he doesn't define substance by unity.

How was substance defined by the seventeenth century Classics? They defined it by its essential attribute, otherwise it is undefinable. The thinking substance is defined by an essential attribute which is the thought from which it [the substance] is inseparable. There is -- it's the case this truly applies -- there is reciprocal inclusion between substance and its essential attribute. It is the essential attribute "thought" that defines the thinking substance. It's the essential attribute "extension" that defines the extended substance or the corporal substance, for Descartes. A substance is inseparable from its essential attribute and, inversely, substance is defined by the essential attribute. I would say that at that moment, the entire Classical age is essentialist.<sup>14</sup>

Notice that the essential attribute is indeed an attribute. It's an attribute. But, how marvelous it for me to be so correct, if I dare to say: Leibniz justifiably wants nothing to do with this

definition. That is, for him, judgment is not a judgment of attribution. He does not want to define substance by its essential attribute. Why? Because for him, it's an abstraction, and substance is concrete. This suggests the extent to which he rejects the judgment of attribution; he wants nothing of it. How is he going to define it? A substance is, in fact, a unity. It is One. So Leibniz can say: but everybody always said that substance was One. Yes, of course. But for others -- that's where we encounter a dialogue of the deaf with Arnauld -- for others, unity was a property of substance, it wasn't its essence. Essence was an essential attribute, the attribute from which it was inseparable. As a result, it was one to a certain extent, but it was a property of substance, being One, whereas for Leibniz, it is its essence: the only essence of substance is to be One. It is monad. It is *monas*. It's unity that defines substance: that's what is new.

Henceforth, to the correlation substance-essential attribute as it is found in Descartes, what is going to appear in Leibniz? An entirely different kind of correlation: substantial unity which is going to be correlated with what? All the *manners of being (manières d'être)* of this unity. I grasp this well: substance is no longer related to an attribute, it is related to manners. It is no longer related to an essence, its essence is tossed behind, it is One. It has no other essence. On the other hand, what it has is manners. The fundamental rapport is no long substance-attribute, the fundamental rapport is substance-manners of being. Substance has manners of being. Is it exaggerated to say that Classic essentialism is opposed – I'm not inventing this term – to Leibniz's *mannerism*? For what do we call mannerism? We'll call mannerist is a conception or a vision, a philosophical conception or pictorial vision that characterizes a being by its manners. We have to take manners in the most literal sense of the term: manners of being. To the rapport substance-essential attribute, Leibniz substitutes the rapport substantial unity-manners of being. Yet again, this reveals the extent to which it has nothing to do with a judgment of attribution. [*Sixth gap in the WebDeleuze transcript*]

So who de we account for this? You see, the world is in the individual notion exactly as, rather... The world, that is, the series of events, constitutes the manners of being of the subject for each subject: "I write," "I am born", "I write," "I die," "I go to Germany," "I cross the Rubicon", etc. [*End of the gap 6*] In any case, each monad expresses the totality of the world. Each monad expresses the world, each substantial unity expresses the world; in other words, the world is the manner of being for substantial unities. The world is the predicate of the subject. It's the manner of being of substantial unity.

So what is that? [*Deleuze goes to the board and writes*] Let's call that a portion, or a knot ! It's the great Baroque knot. The great Baroque knot is the famous knot in history or in mythology called the Gordian knot. And what is the Gordian knot? It's included in the medical caduceus. The Gordian knot is two indiscernible snakes. I mean: the Gordian knot is a knot that neither begins nor ends. It's the knot that the great king Gordias had made so that his royal chariot, the yoke and the hitch, were well connected. You know that in mythology, there is an entire history of knots that are basic, these are magic signs par excellence, and the Gordian knot is one of the most beautiful magic signs. It's a knot without beginning or end, that is, from which nothing can escape. It's the perfect knot, it's the knot within itself, it's the absolutely closed knot. So, how do we go about representing this? [*Deleuze draws the Gordian knot*] There you have the Gordian knot, irritated that he was unable to undo it, very difficult to undo a knot without an end, he took his sword and

cut through it. That's what Alexander did. This means that the two elements of the Gordian knot are perhaps inseparable.

Leibniz – I was telling you this at the last session; that's where we ended the previous presentation -- Leibniz with Arnauld, he's amazing because he makes Arnauld see it, all the more amazing since Arnauld has no time for it, he's annoyed, he says he has other things to do. He says: I have to think about the Holy Trinity, [*Laughter*] while your metaphysics bores me. Leibniz takes this badly and says: but if you understand my metaphysics, you understand the Holy Trinity. Which, in fact, is true, certainly, among other benefits. He loved to make lists of all the benefits there were from understanding his own philosophy. [*Laughter*]

He spent his time saying, in his correspondence with Arnauld: look here, God did not create monads, that is, individual notions, he created the world. God created the world in which Adam sins. God doesn't create the sinner Adam – it's a way of saying that it's not God's fault if Adam sins – he creates the world in which Adam sinned. You follow me? But this proposition is null if you don't link to it the second proposition. So God did not create individual notions; he creates the world to which these individual notions refer. Second proposition: but pay attention, the world does not exist outside individual notions that it includes, that it envelops. How can we schematize this? This consists in saying perpetually: monads are for the world, subjects are for the world is in monads, in subjects. If you suppress one of the two propositions, all is lost.

So let's try. To take stock of the Leibnizian knot: the Ego-the world, the subject-the world, at first sight, one wants to draw this. Why? Because I make the world bigger than the subject since there is an infinity of subjects. You see, all this is illuminating, it's the Gordian knot, of which one loop is quite small; but you again find the Gordian knot. It's the great Baroque torsion, it's Mannerism; that's the photo of Mannerism, we just have to complete it. I complete it with two little arrows that indicate that the individual notion is for the world.

Now I must indicate that the world does not exist outside the individual notion, I indicate that, in the broken dots. My big circle is only in broken dots. [*Deleuze continues to draw on the board*]<sup>15</sup> There, suddenly, it's obvious that the monad is for the world, but the world is in the monad, provided that I add arrows that cause the world to return into the monad. There, that becomes perfect. But there is not solely one monad, there is not solely one individual notion, there's an infinity of them: all of you, Caesar, Alexander, etc., of which each one includes the entire world in its own point of view. I have to take this into account as well. So... [*Deleuze continues drawing*] I can continue like that. Each little loop will be an individual notion. What is this torsion, [*He taps on the board with chalk*] this Baroque torsion par excellence? [*He continues drawing while speaking*] This is a chiasmus; this is an intertwining (*entrelacs*). [*Pause*] A chiasmus, and an intertwining... Is this ok? We can add here... There we are. In fact, it's an infinity. The world – individual substances, individual notions: each one for the others, the other in each one. Once again, it's a rapport of subjects and of the world.

I'll go very quickly since this would take us too far off track and besides, we'll be coming back to this problem, what seems very interesting to me is an experience like Merleau-Ponty's. The rapport of subject and the world, you know the extent to which it was involved in

phenomenology and Heidegger, being in the world. The common theme of Heidegger and Merleau-Ponty is: at the beginning, in Husserl and his disciples, the rapport of subject and the world is presented in the form of intentionality. Early on, Heidegger distinguishes himself from Husserl and the Husserlians by breaking with intentionality, and substituting for it what he calls being-in-the-world. In fact, that connects quite well to the text by Merleau-Ponty, stating: one had indeed to break with intentionality because intentionality by itself, such as it was defined by Husserl, does not guarantee for us that it's anything other than a simple "learning" [*English in the text*], a simple psychological apprenticeship. So if one wants to escape from psychology, intentionality did not suffice.

So how to escape from it? Merleau-Ponty takes this up after Heidegger. You have only to return to a text like The Visible and the Invisible, he says it himself: what's going to replace intentionality is the chiasmus, the intertwining, this kind of world-subject torsion. And it's what Heidegger will later call the fold. It's curious how all these notions come back to us. And to add [to this], in his notes at the end of his life, Merleau-Ponty never ceases referring to Leibniz, it's curious. Take a long posthumous note published at the end of *The Visible and the Invisible*, [Deleuze returns to his seat and consults the text] a very interesting, long note on Leibniz (p. 276), a whole page on Leibniz, where he says: "The expression of the universe in us" -- that is, each monad includes the universe or expresses it -- "is certainly not the harmony between our monad and others" -- that's counter to Leibniz, but he uses a Leibnizian language -- "it is what we see in perception, to be taken as such instead of explaining it. Our soul has no windows, which means being in the world (In der Welt Sein)."<sup>16</sup> Very odd; I could read the whole page, it's very interesting because what he substitutes for Husserlian intentionality, for Heidegger this will be the fold of the being and state of being (*de l'être et de l'étant*), and for Merleau-Ponty, this will be the Chiasmus, that is, the portion of the world and the subject. At the end, Merleau-Ponty wavers, to some extent, between Leibniz and Heidegger. This is what I wanted to summarize for you.

You are going to take a short break, but a very short one, since we've come to this point that I had reached in the previous session. So here we are, that's what inclusion is in the propositions of existence; it's therefore this torsion as we have just seen. So we have exactly reached - please grant me another minute of your time – it's exactly this: yes, but there's a great difference between propositions of essence and propositions of existence. The difference is this: in propositions of essence, the contrary is contradictory, that is, 2 and 2 do not make 4; it's contradictory or impossible. In the propositions of existence, you say that the world is in the world. It's quite possible; the world is in the individual notion, it's quite possible. But still, one has to explain this: you can always think of Adam as not sinning, that is, the contrary. The world in which Adam sinned is inside Adam, agreed; that's why Adam sins. But in the end, Adam nonsinner is not contradictory. Whereas you cannot speak without contradiction in saying 2 and 2 don't make 4. You cannot say it without contradiction: the circle is squared. Whereas you can say without contradiction: Adam does not sin, and you can think of Adam non-sinner. So here, the contrary is not contradictory, it is not contradictory in itself. This is what one must explain. How to explain something like that? I mean, Adam non-sinner is not impossible. Adam nonsinner is possible. One has to explain it one way or another. ... We've had enouch [Interruption of the recording; pause in the session] [1:50:24] []

#### Part 3

[*Gap seven in WebDeleuze transcript*] So, fine, listen to me because this is becoming a very pathetic and very essential problem. How is it possible or me [*End of gap 7*] to think of Adam non-sinner? Let's try to pose the problem concretely: Adam non-sinner is contrary to Adam sinner. The rapport between Adam sinner and Adam non-sinner is a rapport of contradiction, there we have it. My question is: can we localize another type of rapport? Yes, we have to. This matter is not easy, and you sense that I am penetrating into a rather special Leibnizian concept: those who are familiar with this, it's the concept of incompossibility, the compossible and the incompossible in Leibniz which not the same thing as the possible and the impossible.

But where do we situate this rapport of compossibility and incompossibility? Between Adam sinner and Adam non-sinner, the relation is one of contradiction. It is impossible that Adam would be both a sinner and non-sinner. So, where would another, more complex rapport be? If you have followed me, there indeed has to be a more complex rapport. This time it's not the rapport between Adam non-sinner and Adam sinner, but the rapport between Adam non-sinner and the world in which Adam sinned. In this, there is a rapport which is not contradiction or impossibility. Besides, if not, we have no choice, because otherwise, we don't see what Leibniz means with his rapport of compossibility and incompossibility. I must say: Adam sinner and Adam non-sinner are contradictory. But Adam non-sinner is not contradictory with the world in which Adam sinned, it is incompossible, such that Adam non-sinner is possible, in contrast to 2 and 2 make 5. Adam non-sinner is possible; this is simply incompossible with the world in which Adam sinned. [*Pause*]

So there is indeed a sphere, a zone in which incompossibility is distinguished from contradiction. Being incompossible is not the same thing as being contradictory, it's another relation. So, what does being incompossible mean? Leibniz's famous formula: "Adam non-sinner is incompossible with our world," that is, with the world in which Adam has sinned. But it is not contradictory; what is contradictory is "Adam sinner" and "Adam non-sinner", but the relation Adam non-sinner and the world in which Adam sinned goes beyond contradiction: it's a rapport of incompossibility. Incompossibility is a very, very curious notion, a notion that appears only in Leibniz.

And so, what is vexing is that – there is a Leibniz text, particularly clear on incompossibility. I will read it: "So we do not know where incompossibility comes from" -- that is, he affirms the irreducibility of the incompossible to contradiction -- "we do not know where incompossibility comes from out of the diverse" -- diverse things, diverse substance --; "that is, we do not know what could cause diverse essences to reject one another". We don't know. He says: there is incompossibility, it is not reduced to contradiction, and we do not know where the incompossible comes from. We don't know what makes "Adam non-sinner" incompossible with the world in which Adam sinned. We understand the contradictions, we do not understand the incompossibilities: we can only take note of them.

Fortunately there is another text in which Leibniz says – so, I have to provide this for those who need it, the scholarly reference; there are several great editions of Leibniz, and one of the best known is the Gerhart edition; the Gerhart edition in the philosophical works is in seven volumes,

if I recall correctly, I do believe. There are several editions like that since I explained to you regarding the state of the manuscripts, so it's a very great edition, the Gerhart edition. It's in volume 7, page 195, for those who want to verify this, but to you, I [*unclear word*]. On the other hand, you will not find them since they are unlocatable. [*Laughter*] No, they have just been reedited by an editor named Olms. So you can find the Gerhard edition, but it's difficult in France; you would need to get it from Germany. After all, just ask your bookstore owner! So, [volume] 7-[page] 95, I assure you that's it, in Latin, a Latin text, I translated it without mistakes, without misunderstandings.

I'm saying that there is another text, in *La Théodicée*, a very fine text saying: -- although we might not understand, we can grasp in general, which authorizes us therefore for once to be more Leibnizian that Leibniz, you understand; but I have my text that authorizes this, it gives us permission. -- Here is what he says about another subject but it's the same, the subject of grace, the problem of grace: "If someone asks why God does not give to everyone the grace of conversion" Etc. "What happens? We have already answered this in some way: not in order to find the reasons of God" -- you see: it's not a question of finding the reasons of God, that's too obscure, it's beyond us, it's infinity, we saw that -- "but to show that he could not be without them". This is a marvel. It is not a question for us, poor finite creatures, of finding the reasons of God, but it's a question for us to show that God in every case does not lack reasons. So we do not know which ones, but all we want is to know that he does not lack them, and the rest is his business. Which gives me the right to say the same thing for incompossibility: fine, we don't know what the rapport consists of, [but] these are God's reasons. But we can nonetheless show that it does not keep it from being a rapport, and a rapport irreducible to contradiction.

We can go on, and with this, we can create a hypothesis provided that it is supported by certain texts by Leibniz: let's start from my monad Adam. I start off from the individual notion Adam, so let's make a start. [*Deleuze returns to the board and starts drawing*]<sup>17</sup> Here you have to play close attention; this is going to be a very, very strange thing. Henceforth, since you are tired, I am just going to create a schema, and then the next time, we will consider it in depth. The next time we will start from there, we won't backtrack, I swear it.

I am saying: in the monad Adam, certainly, he expresses the world, and he is for the world; everyone is included. But you recall [Leibniz's] idea: how are two individual subjects distinguished when each expresses everyone? Fine, each one expresses the totality of the world, but each also only expresses clearly a small portion of the world. So given two individual notions, both express the entire world, but only express clearly a small portion: if I have my monad without doors or windows, each has a clear zone that belongs to it. At first glance – and I say at first glance because this gets more complicated -- this is how two monads are distinguished: they do not have the same region of inclusion or clear expression as the neighbor. This means that you, you, you have a little zone of clear expression which is not the same as mine.

So there is a hierarchy of souls. Assume that one is facing a monad with a huge region, a quite voluminous region of clear expression. I would say that all things considered, it is worth more than one that has a tiny one; and to perfect oneself, that is, to do philosophy, [Laughter] is to increase one's zone of clear perception. [Start of eighth gap in WebDeleuze transcript] What?

Does having a sports car increase one's zone of clear expression? On this [point], I know of texts for and texts against. [*Laughter*] Physically, yes; morally, no. There is a physical progression, but a moral collapse, so one has to bring in so many factors. [*Laughter*] But making music, that increases one's zone of clear expression considerably. It depends on what music. [*Laughter*] Fine, what was I saying? [*End of WebDeleuze gap 8*] We are only interested in Adam's zone of clear expression, that is, the portion of the world that, in the end, concerns him directly. I am trying to mark this out, and we will see what this marking means.

I'm saying, as first trait, that will be explained: Adam is the first man. What does this first trait mean? It's a predicate, it's not an attribute, it's an event, "And God created the first man," it's even a very considerable event. It's an event. So, second trait; will there be another trait? Yes, let's continue. I've located my first trait for Adam, my first predicate for Adam. Second trait: "living in a garden." Up to here, it's textual from Leibniz. I'll tell you when I no longer have the texts to support me. For the moment, I have all the texts on my side. Second trait: "living in a garden." Third trait – you'll wonder why I'm listing this top down instead of bottom up, but that doesn't matter -- Third trait: "having a woman born from his rib."<sup>18</sup> Eve was born from Adam's rib, this is an event as well. You see, three events: being the first man, living in the garden, have a woman born from his own rib, three events.

Fourth event: enduring a temptation. [Laughter] I would say that these are predicates, as well as being verbs. These are events. What does that mean, events? It means inflections; these are inflections if you recall what we have considered previously. This is a snaking line that goes from predicate to predicate. I can now give these inflections a more precise term. This word is one we have used during the first trimester; I'd say that these are *singularities*. What is a singularity. It's an inflection, that is, something that happens. You see, the essential thing is, above all, do not confuse "singular" and "individual". Adam the individual is the subject, the individual notion. Singularities are his predicates that belong to him; these are the predicates that he includes in his clear zone: being the first man is a singularity; living in the garden is a singularity. The singularities are events.

Every event, moreover,... So I'd say [that] an event is not a complex of singularities. [*Pause*] It's only the notion of singularity that is a fundamental mathematical notion since it concerns what happens to the curve, what happens to the line. For example, we will say about a square that it has four singularities. These four singularities are defined there where it changes direction, that is, when something happens. Between two singularities, what is there? Here I am saying things for which I apologize to those of you who are familiar with math, but you mustn't resent my saying such elementary things. I'd say that between two singularities, there is a line what we'll call, let's suppose, a line of ordinaries, of ordinary points.

So it's more complicated than that because... but no matter. Here we have a square with four singularities. What can I say? As Leibniz says, in a beautiful phrase from *New Essays on Human Understanding*, "What is remarkable" – let's understand this for the moment as the same thing as "singular"; in fact, it's not quite that, but no matter – "What is remarkable" – he's speaking as a mathematician – "must be composed of parts that are not such". "What is remarkable"... In other words, a singularity is composed of ordinary parts. What does that mean? Well, it's the coincidence, a singularity, it's the coincidence of two ordinaries. You see? An ordinary from line

1 and an ordinary from line 2, the two ordinaries coincide in a singularity. Good... All that... Leibniz continues, and these are not metaphors, eh? It's really mathematical logic. The predicates insofar as being events are singularities, complexes of singularities.

There we are, so grant me... I can... With a given individual notion, I can extract singularities from it. Let's suppose... There's a fine term used by mathematicians, I believe, which is the surgery of singularities. I do an extraction of singularities. I operate on Adam. Let's operate on Adam means what? It's to extract, in a precise order, the singularities that are included in his notion. So you can do this; you can undertake a Leibnizian exercise on your own life. And you will see that it's very interesting, understand? Take your life, and you do your own surgery, your logical surgery. This will be in your life as you see it, extracting singularities, that is, all the moments that constitute events. That happens a lot depending on the scale: a bird's eye view (*un vol d'oiseau*), a close-up view; there are lots, but it matters little. That is, in the end, at a spot where it seemed ordinary, you will perhaps see that everything was already singularities. There are perpetually singularities [going] into singularities, but you also find the opposite, that where you thought something was singular, it was ordinary. Two ordinaries are needed to create a singularity. The coincidence of two ordinaries is required for there to be a singularity.

So, all this doesn't go without saying, and you'll see. You will do your surgery of singularities, and fifty years later, because you'll have already in place an understanding of yourself entirely better than with ten years of psychoanalysis... [Laughter; inaudible comments by Deleuze to the students] What?

A student: Have you done your own surgery?

Deleuze: Eh? Why yes, obviously... obviously... [*Pause*] What was I saying? ... I've forgotten the word. ... Ah, right. In what way is all this "compossible"?

What have you done? By undertaking the extraction of singularities in a notion, you have done nothing but unfold a portion of the world that it included, that it enveloped. You have unfolded how the monad Adam expresses the world, includes the world; you have unfolded a tiny portion by marking the inflections: being born the first man, living in a garden, being with a woman emerging from his rib, enduring a temptation. The snake indeed comes since it's a series of inflections, right? Good. [*Pause*]

You've understood this quite well, so a second example. How is it that these four singularities belong to the same world? That is, that they belong to the same world you will express by saying that they are compossible; they are compossible. [*Pause; Deleuze returns to his seat*] If you accept the problem... Starting from here, I have no more texts, but in some ways, none are needed because we have no choice. We must indeed undertake the following operation, in appearance mathematical, but we will see what's happening in mathematics.<sup>19</sup>

I can take my first singularity as my first singularity extracted from Adam. I can take it as the center of a circle, the center of a circle whose radius ends in the neighborhood (*voisinage*) – in the neighborhood, also a mathematical notion – in the neighborhood of the following singularity,

singularity 2. Singularity 1 [is] with the first man; singularity 2 [is] living in the garden. I take my first singularity, which is: here is how God created the world. God took the first singularity as the center of a circle whose radius goes all the way to the neighborhood – my whole figure here [*Deleuze indicates what he is drawing*] is childish, really childish; for the moment, there's nothing mathematical attached to it – that goes to the neighborhood of the second singularity. You will tell me, this circle, it's going in all directions! Well yes, but what about the world? There's an infinity of cases in the world prior to Adam. You will say, not really, it's seven days. But, these are seven biblical days! Seven days in an infinity! So, for the last one there, you have every reason to create a circle. There we are.

Now, [*Deleuze taps on the board with the chalk*] you situate yourself at the level of your second singularity, being in the garden. You take it, with the center of the circle, but it's a circle, or is it the focus of an ellipsis since everything is suitable? I am providing the simple illustration. [*Deleuze draws*] So you trace what you establish as a center there, and then you trace a circle with the radius going to the neighborhood of the first singularity. They have a part in common; if you draw the line, it goes from the first to the second singularity. There's a part in common for both circles. [*Pause*]

Suppose that this part in common is endowed with constant values in both directions. If this part in common has constant values in both directions, where is the limit? If the infinity of points of this part in common have a constant value in both directions, you will say that the series that goes from the first to the second singularity and from the second to the first one is a *convergent series*. [*Pause*] Have you understood? And you do the same things closer and closer for the second and third ones. Each time if... [*Deleuze sits down*] Each time you say, the series is convergent if the portion in common between the two circles is endowed with constant values. That is, if these are the same values, for example, if these are the same values of garden that we find when going from "the first man" to "being in the garden" and from "being in the garden" to "the first man", if these are the same values, the series is convergent. Ok? If you agree, we sense that it's a whole.

Suppose now that you arrive at something where you draw your circles, and the two paths don't have common values, that is, the portion in common doesn't have common values, the portion in common to both circles doesn't have common values. In the end, that comes down to saying that the two circles do not intersect, that is, the series going from one singularity to another one is *divergent*. Fine. So, we have won! Here there is *incompossibility;* there's incompossibility, that is, you draw your circles in convergence, and the series is not convergent. The series occupying the portion in common is not convergent. There is a divergence of the series.

So this is marvelous! Look at what you would reach if all this is true. It's an infallible method for creating the world. God starts out; then, he tosses out the event, the first man, 1; and then the event, being in the garden; and then the event, having a woman born from his rib; and then the event, endure the temptation. And the series from one singularity to another are convergent series. Henceforth, all that is compossible. Then you reach "enduring a temptation", and this is convergent. And then you toss out the new event, resisting the temptation. Aie, aie, aie, it's diverging, it's diverging! Henceforth, that belongs to another world; that belongs to another world, for all that is not compossible with this world. In order to resist the temptation, there

would have had to be another garden that has other values: another rib, or no rib at all, another generation. You see? The common values for both series that intersect are no longer convergent; they are not constant. There would have had to be other plants in the garden, given that resisting temptation was incompossible with the world chosen by God. God could have chosen the world in which Adam resists temptation and doesn't sin. Fine, understood, but that would have been a world that diverges from our own.

What am I saying? Something quite simple: how is it that incompossibility wouldn't be any contradiction? [*Deleuze speaks here extremely deliberately, word by word*] I believe that being compossible is when the extension of a singularity to another one occurs through a convergent series, and incompossibility is when the extension of a singularity to another implies a divergent series. What is this? All of this is odd. Fine, this seems odd to me.

So, on this point, please allow me – this starts us off into our next meeting – allow me to read to you a very clear passage, however, concerning some very detailed mathematics, developed after Leibniz but with a very Leibnizian basis, by a great mathematician who, in some ways, is close to Leibniz, named [Karl] Weierstrass. [*Deleuze spells it out*] So here we are, I am reading this from a text by Albert Lautman, a specialist in the philosophy of mathematics, who died during the war, dead during deportation or shot, I don't recall, and who had begun some very important research. [It's] on page 21 of a book by Lautman that's been re-edited in a paperback collection, a very great book on the philosophy of mathematics entitled *Essays on the Notions of Structure and Existence in Mathematics*.<sup>20</sup> Lautman examines Weierstrass's theory, or rather Weierstrass's method. There you have the topic. I will be reading very, very slowly so you can see. This has both nothing to do with what I was just discussing and, at the same time, it's a perfect and rigorous application in mathematics. Lautman is presenting Weierstrass's theory, or rather procedure by Weierstrass.

"An analytical function" – I'll be reading slowly so that we have the time – "An analytical function is defined for Weierstrass in the neighborhood of a complex point" – no matter, I take this as a typical example; even those who haven't studied mathematics at all can understand this, I assume; it doesn't matter whether or not you know what an analytical function is, no matter; you can translate this by "a certain type of function" – "An analytical function is defined for Weierstrass in the neighborhood of a complex point" - no matter that you don't know what a complete point is; just hold on to a point, a particular kind of point – "by a series of powers of numerical coefficient" - no matter that you don't know what this is; I will repeat: "An analytical function is defined for Weierstrass in the neighborhood of a complex point by a series of powers of numerical coefficient." I maintain that this sentence is philosophically intelligible for anyone. Period. "The method of analytical prolongation" - this is Weierstrass's method - "allows an entire domain to be constructed closer and closer in which the function is called analytical and is done so in the following manner." See, first, I define a function in the neighborhood of a complex point by a series of powers of numerical coefficient; second, starting from this, I am going to undertake through analytical prolongation; third, what does this analytical prolongation consist of? "One takes as the new center a point inside the first circle." Oh, excuse me, I've forgotten. I skipped over something, something essential. I've skipped over it, [Deleuze laughs] and you're in danger of not understanding this. [Deleuze repeats the quote from the start]

"An analytical function is defined for Weierstrass in the neighborhood of a complex point by a series of powers of numerical coefficient that converge in a circle of convergence around a point. The method of analytical prolongation allows an entire domain to be constructed closer and closer in which the function is called analytical and is done so in the following manner. We take as a new center a point interior to the first circle. In this way, one obtains both a new series and a new circle of convergence that overlaps with the first. The new series prolongs the first one" – this is what is important for us – "The new series prolongs the first one if their values coincide in the part in common for both circles." -- You see? -- "The new series prolongs the first one if their values coincide in all directions all the way to the points in the neighborhood immediate to which the series obtained would diverge."

There you are. That's all I need; I need nothing more than this ending. "The new series prolongs the first one if their values coincide in the part in common for both circles. In this way, the series can be prolonged in all directions all the way to the points in the neighborhood immediate to which the series obtained would diverge." Leibniz's mathematics, you recall, being based at least in part on infinite series, I believe that the use here of this conception from Weierstrass is possible as regards Leibniz. What does this come down to saying? [*Deleuze goes to the board*] So, I'll return to our story: if [we have] Adam resisting temptation, fine, it's possible. You see, it's still possible with two worlds because you cannot obtain it by analytical prolongation of series. There you fall into divergence; you fall into a divergence of the series. So, resisting temptation is incompossible with this world. Let's forget this momentarily.

Let's try to imagine something. How would I define the individual? One has to seize the moment. Let's return to the matter of nominal definition-real definition. [*Deleuze sits down*] I was saying earlier, two monads or two individual notions are distinguished in this: that they do not express, that they do not include the same clear and distinct portion. This was already a way of distinguishing two individuals. But this doesn't work; it's the reverse. Two individuals are distinguished, no. Two individuals are not distinguished because they express a different clear and distinct portion. One must say the opposite, based on the evidence. They express different portions because they are distinguished. In other words, this is a nominal definition of the individual, not having the same clear zone. This is a nominal definition; it's not a real definition. I must have a real definition of the individual.

What is an individual? What is an individual notion? I have it, a purely Leibnizian definition, so Leibnizian that he didn't provide it. It's as if that went too much without saying for him. I'd say that an individual is a condensation of singularities able to be prolonged; it's a condensation of singularities able to be prolonged, that is, it's a condensation of convergent singularities. Notice the importance of distinguishing between singular and individual. It's that singularities by themselves are not individuals; they are pre-individuals. They are pre-individuals exactly like the world is primary in relation to individual notions, [*blocked word*] do not exist independently. The world is primary in what sense? God created the world, not the notions. Simply he created the world in such a way that this world he created does not exist outside the notions, but the notions derive from the world.

Thus, the individual notions result from the world. The individual notion of Adam results from the world, which itself encompasses the events "having a first man," that one "situated in a garden," creating "a woman from the rib of the first man". Singularities are pre-individual. So there is no vicious circle. When I say the individual, this is a condensation of a certain number of pre-individual singularities insofar as they converge with one another. [*Pause*] Another Adam, an Adam non-sinner, was possible... [*Interruption of the recording*] [2:35:07]

... so that one understands existences and their laws of incompatibility. Furthermore, perhaps already the incompossibilities are implicated in mathematics at the level of convergent series and divergent series. In any case, I can say [that] the border of our world is always the states of world [*états de monde*]. To create a linkage with states of our world would imply a divergence of series. [*Pause*] Understand?

Here is exactly what I would like to ask you.<sup>21</sup> What do you... In your view, and excuse me for asking you this, is this ok as a starting point or not?<sup>22</sup>

That's right; I had to put it... [Maarek continues] Whereas in fact, you notice the essential point; in Weierstrass's method, the method makes no sense. [Maarek continues] ... which is inside the circle.

Maarek: That is, we remain within the same thing... [Inaudible words]

Deleuze: ... as the first singularity, whereas I need... [Maarek continues] That's right, that's right, but at the same time... You show very, very well how the schema to which that belongs does not coincide finally with Weierstrass's schema, and at the same time, I have a feeling that it's the same approach. But it's here then, that this escapes me, this escapes me, that is, one would have to say... [Maarek continues] It's a new series... [Maarek continues] That's right... It exists only in the zone in common. [Maarek continues] Yes, yes, but from that moment on where a new series... But he... Isn't it because his departure point is the complex points? [Response from Maarek] ... Yes, because it goes in all directions. [A long comment by Maarek (45 seconds) during which Deleuze goes to the board]

Whereas I am only conserving from the circles the radii, that is, the linear structures... [Maarek continues] ... In fact, here where you clarify things enormously, it's undoubtedly for this reason that I am forced to place my neighboring circle before my following singularity, whereas he necessarily takes...

Maarek: You would have been in the same zone...

Deleuze: But can one say that my own schema would be like an elementary simplification, that my rectilinear schema would be an elementary simplification of his own schema which is, as you say, for the plane and not for the line? [A long response by Maarek (75 seconds) addressing links between Leibniz's conception of numbers and the schemas being considered, to which Deleuze finally responds]

I was not at all aware of that; I see what you are saying, but I know very, very little about this. [*Maarek continues (30 seconds)*] That would be amazing, and would you like to tell us a bit about this aspect of the topic at the next class?

Maarek: [Inaudible comment ending with]: I'll be able to speak about this better the next time.

Deleuze: Great! Isabelle [Stengers], are you aware of this?

Isabelle Stengers: Not about the numbers.

Deleuze: Not about the numbers. [*Brief discussion between Isabelle Stengers and Maarek*, 2:43:21-2:43:30]

So what I would like is that the next time, if you will, that Isabelle... There is one point, it's... There are two points. There is this story about the schema and the possibility of using the notion of convergent series and divergent series to take account of the compossible and the incompossible. That's point one. And then the other point is the definition I had derived of individuality as condensation of convergent singularities. I maintain this more, I feel much more confident about this.

So my dream is that, if you would be so kind, and if Isabelle would be so kind, you and Isabelle would delve a bit into this relation of singularity and individual. Is this possible? Are you here for the next class? If this doesn't create difficulties for you... Or anything you see about this problem. [*Pause, apparent silence*] In any case, for the next class, those who will come and wouldn't again be entirely disgusted, [*Laughter*] you must review this ending and situate all this readily in your mind because we will really be asking... We have every chance of expecting, as we say, from our friends who know about mathematics some things entirely... that I could not consider all alone. So for us, this will be very, very valuable. [*End of the session*] [2:45:08]

## Notes

<sup>&</sup>lt;sup>1</sup> Given that the 16 December session and the 6 January session required that Deleuze summarize extensively after, respectively, a four-week and a three-week hiatus, it is ironic for him to begin again by summarizing the material presented one week earlier. This approach serves as an effective pedagogical tool in light of the complexity of the material, but also here allows him to offer his first full session with predominantly full material since the 18 November meeting. Regarding this text, there are significant gaps in the original Web Deleuze transcript (and recording) which, fortunately, have almost entirely been supplemented thanks to the BNF recording which, on YouTube, is ironically attributed to WebDeleuze.

<sup>&</sup>lt;sup>2</sup> Cf. *The Fold* (Minneapolis: University of Minnesota Press, 1993), pp. 27-28; *Le Pli* (Paris: Minuit, 1988), pp. 38-39.

<sup>&</sup>lt;sup>3</sup> Sarah Kofman, *Camera Obscura: Of Ideology*, trans. Will Straw (Ithaca, NY: Cornell University Press, 1999; Paris: Galilée, 1973).

<sup>&</sup>lt;sup>4</sup> Jean Rousset, L'Intérieur et l'extérieur (Paris: Corti, 1968); cf. The Fold, p. 29.

<sup>&</sup>lt;sup>5</sup> Jean Rousset, La Littérature de l'âge baroque en France (Paris: Corti, 1953).

<sup>&</sup>lt;sup>6</sup> Heinrich Wölfflin, *Renaissance and Baroque* (Ithaca, NY: Cornell University Press, 1987; Paris: Livre de Poche, 1987).

<sup>&</sup>lt;sup>7</sup> Walter Benjamin, *The Origins of German Baroque Drama*, trans. John Osborne (London: Verso, 1985); cf. *The Fold*, p. 125; *Le Pli*, pp. 170-171.

<sup>8</sup> On propositions and inclusion, cf. *The Fold*, pp. 42-43, *Le Pli*, pp. 56-58.

<sup>9</sup> On the Identicals and the Combinatory, cf. *The Fold*, pp. 48-49, *Le Pli*, pp. 64-66.

<sup>10</sup> On Russell in this context, cf. *The Fold*, pp. 53-54, *Le Pli*, pp. 72-73.

<sup>11</sup> On this inclusion, cf. *The Fold*, p. 49, *Le Pli*, p. 66.

<sup>13</sup> On Arnauld, attribution and inclusion, cf. *The Fold*, pp. 52-53, *Le Pli*, pp. 70-72.

<sup>14</sup> On the theory of substance and Baroque Mannerism, cf. *The Fold*, pp. 54-56, *Le Pli*, pp. 73-77.

<sup>15</sup> This drawing is most certainly from the end of chapter 2, *The Fold*, p. 26; *Le Pli*, p. 36. Broken dots are in the French edition, not in the translation.

<sup>16</sup> Deleuze includes this note in *The Fold*, p. 146, note 28; *Le Pli*, pp. 36-37, note 27, omitting in the seminar the German included in the original text.

<sup>17</sup> It is unclear to what these drawings correspond in *The Fold*.

<sup>18</sup> End of the Web Deleuze transcription; the following (forty minutes) transcription relies on the BNF & YouTube recording.

<sup>19</sup> Deleuze returns to the board; cf. chapter 5 of *The Fold*, pp. 60-61; *Le Pli*, pp. 80-82 for the mathematics on singularities connected here to Adam in the garden.

<sup>20</sup> Albert Lautman, Essais sur les notions de structure et d'existence en mathématiques (Paris : Hermann, 1938).

<sup>21</sup> Deleuze speaks directly to his colleague in mathematics, Marcel Maarek, identified by name only during the 3 February 1987 class.

<sup>22</sup> The rest of the class is a dialogue between Deleuze and Maarek whose comments are not sufficiently audible for a word by word transcription. In general, Maarek introduces numerous nuances in relation to the schema that Deleuze proposed as well as about other aspects of his analysis. The following text presents Deleuze's different reactions and comments responding to Maarek's.

<sup>&</sup>lt;sup>12</sup> On this four-part system, cf. *The Fold*, p. 57, *Le Pli*, p. 77.