Gilles Deleuze

Seminar on Leibniz and the Baroque -- Leibniz as Baroque Philosopher

Session 3, 18 November 1986: Point of View

Transcribed and translated by Charles J. Stivale (duration, 2:27:45)

[This meeting is exceptional because, in contrast to nearly all the others that are available only through audio recordings (usually with gaps due to cassette changes), the 18 November seminar was filmed for broadcast on RAI, is now accessible through YouTube, [at https://www.youtube.com/watch?v=yEg4Tc40rWM&list=PL9kBLt-Nsd7sq6hkuanJ34fXtzJJ9FKic&index=3], and hence is a nearly complete class. Also in contrast to the audio recordings, the viewer can see Deleuze's gestures as well as his use of the blackboard, an important context nearly entirely absent from the translations based on audio transcripts. At one point, however, there is an unexplained 90 second gap in the film completed here with access to the audio recording.]

Part 1

[The film starts with Deleuze entering the classroom, then jumps to him seated at his table between several students, Hidenobu Suzuki and Georges Comtesse, and ready to start]

Let's get going. So I owe you some explanations about all this [the camera crew and setup]. Here's what it's about: the department of philosophy includes a team for a video philosophy course. That interests me a lot, the question of knowing if, in a face-to-face course, something could pass through video, or if nothing passes. So then we decided to try it out twice. This is going to be difficult, and difficult for everyone, two attempts of this sort. Several years ago, we had already tried it with Marielle [Burkhalter], but I think that the equipment then was not as good.¹ And in some ways, this seemed like a good thing to render... but in the end, the spoken word-video relations, all that, seem to me interesting, at least it is for me. And then, I have an even more perverse idea, that since you force me to speak in front of machines [Deleuze points to the line of tape recorders set in front of him on the table], it was the dream of having myself taken yet again into an even greater machine than you. All this connects obviously to the subject of our meeting today which will be, [Up to this point, the transcript source is the RAI-3 video; here begins the BNF recording] you will understand quickly, something like the inclusion of points of view, or the inclusion of points of hearing, that is, how a point of view can adopt another point of view, can identify another point of view, can encompass another point of view, or a point of hearing, can seize another point of hearing. Good, on that note, let's go.

I will try to summarize so that this will be very clear, where we are right now. I will try to summarize where we are. You remember... -- I'd like you to keep this vaguely in mind

each time. -- You remember what our global problem is for the entire year? Our problem is the possibility of a definition of Baroque philosophy, that is, of Leibniz's philosophy, as a function of the following determination, the fold, starting from the idea that in the end, the Baroque operation par excellence is the fold, creating folds, on the condition that this be to infinity (*à l'infini*); the fold taken to infinity, with everything that this entails, notably the operation of smoothing angles: that's what would define the Baroque act.

But hardly had we stated this regarding Leibniz, that it was a philosophy that carried the fold, the pleating, to infinity, we saw that there was a bifurcation. That is, the fold was distributed between two floors, the lower floor and the upper floor. And on the lower floor were the pleats of matter, the pleats of matter when matter is subjected to infinity. And the pleats of matter when subjected to infinity, we saw... We began by studying them in a very general manner, and we were connected... The pleats of matters connected us, on one hand, to the elastic physical body, and on the other hand, to the organic body that possessed the property of folding its own parts and of unfolding its own parts. Folding in its own parts was the involution of the organic body; unfolding its own parts was the evolution of the organic body. And from that point, we came upon some pairs of notions: in-volving and evolving; implicating and explicating; enveloping, developing – all pairs of notions that manifested the fold.

And then, the last time, we moved on to the other floor, and the other floor was no longer the pleats of matter, it was the fold of the soul. Why these two floors, etc.? We are still far from being able to consider these questions. We will take them as they come. The folds *in* the soul are going to constitute the other floor, as what? As *form* of the infinite, or as the ideal genetic element.²

To each floor, you remember, corresponded two labyrinths. Leibniz told us that all philosophy was stretched between two labyrinths: the labyrinth of the continuous under development, but I would also say that it pleated itself since the labyrinth is the figure of the fold: the labyrinth of the continuous that pleated itself of enveloped itself into matter. And [there is] the labyrinth of freedom that enveloped itself in the soul. And no doubt, what nearly interests me the most is the communication between these two labyrinths. In fact, they communicate just as the two floors communicate.

Good, good, good. So we had started studying folds in the soul as a form of the infinite. And the last time, we only went, we had travelled a little bit onto the path of this second labyrinth. We had gone from inflection to the infinite series. That was our goal for the previous meeting, and that came down to saying some very, very simple things: this meant, first, that the genetic element of the fold was inflection – I won't go back over all that – that is, the irregular curve of the line around a point, called the point of inflection. You recall the small, quite simple schema.³ [*Deleuze gestures a curve in the air*] And we had already gotten a very, very schematic idea of the sense in which Leibniz's mathematics was a mathematics of curves or of forms of curvatures.

And from inflection, or from the curves, we passed on to the idea of infinite series. Leibniz's mathematics was not only mathematics of curves, but also mathematics of infinite series, which meant what? It meant that the curve is necessarily developed in the form of an infinite series, and that we had to be careful about the notion of infinite series since this notion could only be founded there where it was necessarily a development of an infinite series and could not be presented otherwise. Each time the development could be presented otherwise, that is, as unfolding, each time the development could be presented otherwise, the very idea of the infinite series lacked foundation. And there was one case, as it seemed evident, in which the development could only be presented in the form of an infinite series, which was the case of the irrational number. And it was the irrational number that gave us the key to the Leibnizian notion of infinite series.

Moreover, what does the irrational number have to do with the curve? In order to make our genesis coherent, showing this link is required, which is what we did at the last meeting. In fact, we showed how the irrational number, locatable on a straight line, was only locatable on this straight line to the extent that we had a curve intersect the point that the irrational number on the line truly was, as we could say, a curvilinear point and not a rectilinear point. Rectilinear points were represented by whole and fractional numbers, but the irrational number referred to a truly curvilinear point, that is, the descent of the inflection onto the straight line.

Good. For those who weren't here at the least meeting, this is not that important, but you could better understand, I assume. I am summing up a bit what... But I would like, even for those who weren't here... I am assuming that this is a given, that this outcome is given, specifically that inflection is expressed, or the variable curve, if you wish, is expressed in infinite series. After all, it's very simple, as I told you: take two points on a straight line, as close as you might want. You can always intercalate one, through which an inflection passes, that is, that will be an inflection point. Given two points A and B, whatever their proximity, you can intercalate a point C that will then be the center of an inflection of A to B. Fine, quite simple. If you wish, here it's rather crude, but it's the simplest way to give you a sense of the way in which inflection develops in the form of an infinite series.

Fine. So we were going from inflection to the infinite series. Today's task is what? To go from the infinite series to ... no, not the infinite series; going from inflection to inclusion through the intermediary of infinite series. Why is this today's task? Well, the line is folded to infinity; that's the Baroque theme. The line is folded to infinity; it's a line with variable curvature. But why? [Does] Leibniz really like "why" questions? Here again, in my own view, at the point we have reached in the analysis, we are deliberating on such simple things. Why is a line folded to infinity? Well, in order to place it *within*, to place it inside, that is, it's folded to infinity because it is *included (incluse)*; it is included *insidu*. Inside what? In other words, inclusion is the final cause, as one might say in philosophy; inclusion is the final cause of the fold to infinity. What I am saying here, it's as stupid as... You fold a letter; you fold a piece of paper to place it inside. You fold a letter, a piece of paper [*Deleuze takes a piece of paper and folds*] to put it in an envelope. Imagine that the envelope is infinitely tiny. You fold... [*Deleuze keeps folding*] Whew! [*He folds it to a compressed block*] From inflection to inclusion.

I don't yet know into what the line of the infinite fold, the infinitely folded line, I don't yet know within what it is going to be included. There would have to be... [Deleuze does not complete the sentence] Understand today's goal: what is the term that I must necessarily consider as that which [the folded object] is folded into? That which is folded, is folded into something. So there is going to have to be something, by whatever nature it might be, that it must contain, that it must encompass, that it must envelop the fold. Good, so we see at least... once again, at the last meeting we went from inflection to an infinite series. Today, that was only half of our path, corresponding to the upper floor. We have to follow the other half, that is, from inflection to inclusion through the intermediary of infinite series.

So, fine, I would like that to stay... This all seems to be complicated, but you also get that these are extremely simple operations. As soon as we talk about folding, it's about practical exercises. There are two ways for you to understand me: on the level of practical exercises, of folding exercises, and in mathematics, it's quite important; in biology, it's quite important; and then in a no doubt philosophical way, corresponding to Leibniz's concepts. But this doesn't mean that concepts aren't overlaid (*doublés*) with extremely simple sensitive intuitions. I do believe that it's very unfortunate to try to understand Leibniz starting from considerations on the inclusion of predicates in the subject, to the extent that I ask those who are somewhat familiar with Leibniz almost to forget him. All of those who are somewhat familiar with Leibniz know that he's an author who says that predicates are contained in the subject, that is, "crossing the Rubicon" is contained in the subject Caesar. So we can consider such an idea to be interesting, strange, whatever you want, but it seems very abstract. Why does he say it? This is why we have tried to start off from something else entirely. The advantage of this: [so that] the idea of attributing "crossing the Rubicon" as encompassed in Caesar as subject, would at that point for us, at a certain moment, go without saying.

So I mean [that] sensitive intuition, going from the fold to inclusion, from inflection to inclusion, is very simple. Only we have to follow it step by step and try to construct philosophical notions starting from this idea: that which is folded, is placed inside. That which is folded, rolls itself within. Within what? Within something equal to X. What is this something equal to X that exists to receive that which is folded? Well here, we have to go carefully, and I come back to my inflection. [Deleuze asks for some chalk, then gets up to go to the blackboard; he draws a curve] You recall this entirely convincing drawing of a random inflection with variable curve. [Deleuze sits down, then gets up again] It's not right. [He draws a new curve, then sits down] Ok, that's done. For the moment, we are considering two things: the point describing the inflection and the point of inflection itself. The point of inflection itself is the point in relation to which the tangent crosses the curve. Obviously, we have to consider a third kind of point, which is what? This third kind of point I could call the center of curvature. What is this center of curvature? [Pause] It's the point at which are supposed to meet all the lines perpendicular to tangents of each point taken into the inflection. [Deleuze draws a series of perpendicular lines crossing the line of inflection of one of the curve's folds] Eh? This speaks all by itself [*the modified drawing*].

An immediate objection: if it's an inflection of irregular curvature, there will not exactly be a point, but the center of the curvature will itself run along a closed curve. Why closed? [Deleuze adds to the drawing] Because when you reach the point of inflection, the one whose tangent crosses the curve, you jump to another center of curvature. [Deleuze draws a point in the center of the adjoining curving] You jump to another center of curvature. In fact, in an inflection of variable curvature, all the lines perpendicular to tangents do not meet in a point, but in a region defined by a closed curve. When you jump to the other half [of the curvature], beyond the point of inflection, you jump to another center of curvature in an irregular curvature runs along a determined region. We will say... let's assume... Let's settle on terms: we will say that it has a site (un site). It has a site. So it happens, when the curvature is regular, you have a center point, or you have a site, that is, a region described by the center. Fine. [Pause]

This is very important for us because what does this come down to saying? This means saying that the center is what? The center of a curve, of an inflection with irregular curvature, is and can also be called *point of view* onto the inflection, *point of view* onto the curve. It's in the direction of concavity. We have made a lot of progress since the last meeting, but all this is in some ways very, very elementary. Inflection is affected by a vector of concavity. I mean [that] the privilege of concavity in the inflection is what? It means that it's on the side of the concavity that a center is determinable. How is this determinable center on the concavity side presented? It is presented as point of view. To the extent that the center runs along a region, we will speak of the site of point of view. [*Deleuze pauses*] Fine.⁴

Here I am indeed saying that although we are accessing a new determination of the point, [*Deleuze turns, points to the drawing on the board*] I am no longer considering the point on the inflection, I am no longer considering the singular point that we call point of inflection, there where the tangent crosses the curve. I am considering a third kind of point that I can determine as a point of view running along a site, and determinable by [*pointing to the drawing*] all that, all these little lines that I drew, and I can also call them vectors of concavity. [*Pause*] Point of view. There we are (*Voilà*).

Among all of Leibniz's strokes of genius, here you have his, or one of them: the transformation of the center into point of view. We have just taken a huge step in terms of our problem, moving from inflection to inclusion. I would like for you to sense this. But the ideal would be to sense it without yet understanding it; the ideal is achieved. So I only hold onto this idea: you see, I have passed from inflection, that is, from irregular curvature from which we started, to the idea of a point of view, point of view onto the curvature, point of view onto the inflection, defined outside the line by the center as point of view, the center running along a site.

Sense that every point in space can be treated henceforth as a point of view. Ah, every point in space could be treated as a point of view. But if this is true, if it's true, it gives enormously, that gives a kind of new gravity to space, a new consistency to space, and it removes from space its former consistency. Every point in space can be treated as a point

of view: what does that mean? That means something quite simple. That means that every point in space is such that intersect there – it's not very complicated – that intersect there an infinity of convergent straight lines. [Deleuze draws a point on the board, then straight lines crossing through it] Whatever might be the point in space that you were considering, I can have an infinity of straight lines converge through here, which comes down to saying what? According to what we just saw, every point in space is a possible point of view. Let's complete this: every point in space is a possible point of view on an inflection with irregular curvature.

What a strange world... what a strange world was Leibniz's world. We call it the Baroque world. [*Deleuze pauses here, reflecting*]

Every point in space is such that an infinity of convergent straight lines can intersect there. Fine. Doesn't that also mean that every point in space is such that I can always cause a parallel straight line to pass there in all directions? [Pause] It's the same thing. [Deleuze turns toward the drawing, then again draws on the board] Given a point in space, I can have a straight line with its parallels pass through there, but also a straight line in another direction. [The drawing is a series of parallel lines going in different directions in order to create a figure with crossing lines in a crisscross pattern] Notice that my first drawing, through all points in space, an infinity of concurrent straight lines can still be passing in this point. And then [in] my other drawing, through all points in space, I can have as many straight lines as I want pass there, with corresponding parallels in all directions. The first case refers to what is called a *conical perspective*. [Deleuze gets up to draw again] You see? [He draws a set of lines emanating from a point or crossing through it] My second case refers to what is called a cylindrical perspective. The conical perspective and the cylindrical perspective are immanent to each other. Any point in space is referable to both systems, which comes down to saying something that a mathematician contemporary with Leibniz, [Girard] Desargues, [Deleuze spells out the name] had developed, that concurrent straight lines and parallel straight lines are of the same arrangement (*ordonnance*).⁵

The cylindrical perspective, what is it? It's the point of concurrence to infinity at an infinite distance, and the conical perspective is the point of concurrence at a finite distance. What's important is the mutual immanence of one and the other. The cylindrical perspective is present in all the conical perspectives; the conical perspectives are present, the infinity of conical perspectives is present in the cylindrical perspective. You immediately sense what Leibniz is going to say, specifically: the cylindrical perspective is God; the conical perspectives are creatures. What do they have in common? That of being points of view, points of view perpetually implicated in one another, immanent to one another.

[Leibniz's] *Discourse on Metaphysics* [*Deleuze pages through a book*] I am just reading so that you get the tone: "For God considers from every angle the general system of particular events that he has thought fit to produce to manifest his glory, turning it on all sides, so to speak."⁶ How beautiful, right? You see? [*Deleuze rereads the same citation, then continues*] "As he considers all the faces of the world in all possible ways . . . each

view of the universe, as though looked at from a certain viewpoint, results in a substance", you and me, we are substance, "that expresses the universe in just that way". One cannot say any better that we are conical perspectives immanent to the cylindrical perspective of God.

Good. So there we are. We have passed from inflection to the idea of the center of curvature that is necessarily point of view. It's already a huge step, [*Pause*] point of view describing a site. And there... Let's try to move forward more. I am insisting on the fundamental importance of this transformation of this point into point of view. One of the best books on Leibniz is one by Michel Serres, *Le Système de Leibniz* [*Leibniz's System*], and it's one of the aspects on which Serres has insisted most: how in Leibniz, it's the center [that] stops being a center of configuration to become, if you will, an optical center, that is, a point of view.⁷ This is no longer the point of view that refers to a center; it's every center that refers to a point of view, and can only be defined from there, what Serres expresses by saying that for a geometry of the sphere or circle is substituted the geometry of the cone, the cone whose vertex is a point of view.

What does that respond to? It responds, in fact, to a so-called dramatic situation of the seventeenth century, or with all the more reason, of the Baroque world, to the extent that infinity is introduced everywhere, in the pleats of matter, without series, in the folds of the soul, etc. The world is in the process of losing all center. In fact, how to center the infinite? Where is there a center in infinity? The center is nowhere. The loss of center, right, is a... is almost the dramatic consciousness of the Baroque world. And in a sense, the dramatic consciousness of center is what affects the entire seventeenth century. Where can a center be located in infinity? [*Deleuze chants*] "Give us back a center." Good, they have lost all center; they have lost the earth. They swim in infinity. Good, but swimming in infinity, there is no center, hence, as Serres shows very well, the importance of an operation consisting of changing radically the conception of center. The center, it can no longer be found as point of equilibrium in a configuration. We are going to see it under the new form of point of view.

In this regard, it's what traverses Leibniz's entire philosophy, but it's what traverses all of Pascal's *Pensées*. And Serres is right in this regard to create a long parallel between Pascal and Leibniz... -- What is it? [Nothing, nothing (*A brief interruption at Deleuze's left*)] -- What does that mean, all that, the center becomes point of view? You see there... What we are seeking in this second moment of our analysis is a kind of general confirmation of what we grasped in a limited way by the prior analysis of inflection, notably: inflection refers to a center of curvature that is presented as a point of view, as a point of view going along a site. Now we are seeking the most general expression of this transformation immediately in a chapter of mathematics that, for the seventeenth century, is fundamental, and comes from the geometrician Desargues, who will have as much influence on Descartes as on Pascal and Leibniz. And this chapter of mathematics that I'm thinking of is one known under the title "Conical sections".

The conical sections, what is this? Without doubt, the history of conical sections is an ancient history of mathematics, but here let's continue. I am saying some very rudimentary things; it doesn't matter if you don't understand. And I am saying that it's well known, but the ancient mathematicians, let's say, felt the need -- they couldn't do any differently – to pass through a certain geometrical figure which was a right-angled triangle encompassed in a circle. I needed that to establish the theme of the conical sections that we still don't know about. So they passed through the right-angled triangle encompassed in a circle; it was the triangle through the axis. As Pascal said in a small text on the conicals (*les coniques*), he says that the great merit of his contemporaries, and of Desargues foremost, is that they no longer need to employ the triangle through the axis. So this makes a kind of... what? [A] direct consideration of what is called conical sections.

What are we discussing here? -- Don't take at all seriously mathematically what I am saying since we have finished with... I don't at all want... and then... -- What are we discussing? This is well known... -- [Deleuze gets up, looking for a way to erase the board] You wouldn't have a small...? There we are, I'll move over here. [He moves to the empty board, on the right] -- You see, it's a double cone, but if I gave you just one of them, that's no reason not to give you two. "S" is the vertex; [it's] useless to tell you that it's a point of view-vertex. The eye is presumed to be located in "S". You see what that means? We are already going to substitute for a geometry of the sphere or circle a geometry of the cone. That means that we are going to substitute for the determination of view. [Deleuze continues drawing] And well, look at your cone, assuming that there's a circular base. It could have another base; there are lots of more complicated cases, but you have a circular base.

You cut it by a plane parallel to the base. What do you have? You have a circle. [Deleuze writes 'circle' on the board] You cut it along an oblique plane [and] you have an ellipse. [He writes 'ellipse' on the board] You cut it along a plane... like that... [a nearly diagonal angle] I don't know what to call that, but you see. You cut it into... [Students suggest terms] No, it's not parallel... Anyway, in short, you have a parabola. And you cut it in a way that both cones are affected, [and] you have a hyperbola. You cut it along a plane passing through "S", and you have a point. You cut it along a plane passing through the generative points of the cone, passing through here, for example, [and] you have a straight line.... That's it [He finishes writing each term]. Everything I am saying is lamentable, [Deleuze sits down] lamentable, but I mean... This has nothing to do with... It's just to indicate to you, to indicate what? But here, it's curious. I placed myself into "S", point of view, and what did I do? I varied the planes for cutting my cone, and I have obtained successively circle, ellipse, parabola, hyperbola, point, and straight line.

What is it? At first glance, there is nothing in common between these things, between a point and an ellipse, between a straight line and a parabola, between a hyperbola and a parabola. What is it? And nonetheless what can I say, following Serres's formulation -- and that barely suffices -- I have the metamorphoses of the circle, where I have what?

The connections between a family of curves, if I stick with this case, because I can consider the point and the straight line, that is, when the plane of slice passes through "S" and when it passes through a generative of the cone, I can consider that these are so-called "degenerated" cases. No, but if I take curves – the circle, the ellipse, the parabola, the hyperbola – what do they have in common? Mathematically here, they have something in common, to be at the second degree. Seemingly, they seem to have nothing in common. And yet, I pass from one to the other, the metamorphoses of the circle, by causing the point to vary, the plane of slicing the cone, under the point of view "S". The center is no longer the center of the circle, or even the foyers of the ellipses; the center is the point of view as a function of which I have a law of passage, from circle to ellipse, parabola, hyperbola.

What is the object? At the extreme, I no longer know. I can say... When I say the metamorphoses of the circle – and there as well, Serres showed it quite well – when I say metamorphoses of the circle, I privilege the circle. But first, my cone is not at all necessarily constructed with a circular base. It can be concave, convex, whatever you'd like. And then... [*Pause*] There are no reasons for the circle to have an absolute privilege. The object in all these projects [*Deleuze indicates the new drawing*] are projections, what are called in mathematics of the era the *geometral*. But at the extreme, understand, the geometral is only grasped by God. We, with our finite points of view, we only grasp projections, and not only projections, we grasp the connection of one projection to another. The object is the connection of projections, or if you prefer, if you would like a more modern language, the synthesis of profiles. Every object is in profile. There are only profiles. To perceive is to create a synthesis in profile. Husserl would be infinitely more Leibnizian if he was himself conscious of being so, and yet he was quite conscious of being so. Fine.

So the geometral will perhaps be the object such that it responds to God's cylindrical perspective. But us, we are happy with profiles and their connections. It's the metamorphosis, the object in metamorphosis. This comes down to saying what? That it's another way of saying what we saw at the last meeting: thanks to the notion of point of view, there changes radically the very idea of the object in Leibniz. To underscore the new status of the object, I was proposing that we call it with a strange name – alas, Leibniz did not use it, but we, we can invent the term: we could say that we have found a new text, [with] the true name of this type of object, that could be the *objectile*.⁸ What is it? Saying that the object is an objectile... what could that mean? Why introduce a term like that except as a joke? And still, we don't joke around all that much. [*Laughter*] Why [introduce the term]? In order to regroup a certain number of characteristics.

We would have to say that the objectile is the object insofar as it exists only under its profiles. Henceforth, the object's perspective implies an infinite series of profiles, the synthesis of an infinite series of profiles. Thus it's the objectile; it's the object insofar as it passes through an infinite series. Or if you prefer, it's the object insofar as it states (*decline*) a family of curves, such as circle, ellipse, parabola, hyperbola. Or if you prefer - and here we don't emphasize Leibniz's modernity at all, just as he is truly modern – it's the object insofar as it's defined through a group of transformations. You see there that

the conical sections introduce the idea of a group of transformations by virtue of which I pass from the circle to the ellipse, from the ellipse to the parabola, etc. Or if you prefer, the objectile is the object insofar as it's affected by a curvature or an inflection of variable curvature. There we are, we can say all that.

This is a profoundly theatrical world. At the same time, think... think about the Baroque world, of the importance in Baroque festivals of the transformative decors. The transformative decors were the basis, nearly the basic element of the Baroque festival. Good. It's the Italian theater, really, and Leibniz often identifies with the Italian theater: he says, yes, the world is like an Italian theater, the world is like a transformative décor, that is, the object is indefinable, independently from a group in transformation that affects it or independently of a variable curvature that affects it. It therefore has an entirely new status for the object.

Furthermore, furthermore, it doesn't suffice to speak of metamorphoses because metamorphosis is the passage from one form to another form. The sole conclusion that I can draw is that, in fact, the theory of conical sections as elaborated by Desargues and Pascal in the seventeenth century has the innovation of introducing this theme of metamorphoses of the objet and of truly belonging to what we were seeking as criterion of Baroque mathematics. You see? Of course, I don't pretend to have said anything mathematical at all about the theory of conical sections. And nonetheless, I still have to allude to mathematics so let's return briefly, before being done with this point – the new status of the object, the objectile – let's return to Desargues in his theory of conical sections.

His departure point will be as follows, and you will see that this refers entirely to our problem about projections. Imagine a triangle, any triangle, which turns around an axis. It turns continually around an axis. [Deleuze makes a circular, turning gesture] Are you imagining your triangle? [Pause] The projections of this triangle correspond to each position of the triangle. Good. Is there a law of projections? Can one discern a law of projections, that is, variable images of the triangle as it turns around its axis? Desargues explains that one must -- here, I am saying this because it interests greatly, but finally, what I am going to say, at the same time... [Deleuze rises and goes to the board; there is a slight jump in the film's editing. On the recording, one hears Deleuze's comments as he draws the triangle] I have to speak loudly; I'll make my drawing. There's my axis; there's my triangle. It's turning around the axis. You see that it corresponds to different projections according to each position of the triangle. So - aie, aie, aie, I have to redo it, this isn't right... I need to change this... Ok, that will do - I am just saying that in order to account for the law of projections, Desargues is going to bring six points into play, six - you can guess, there are six determinable ones - six points on the axis, right, corresponding to the vertex. [*Return to the film*]⁹

You see, I have three [points], and then corresponding to the extension of the sides of the triangle. [*He continues drawing, tracing the extensions and marking the points of intersection with a straight line*] One... (two... three...) Ouf! [*He traces just to the top edge of the board*] See how smart my drawing is; it's stopping just in time. One-two-

three-four-five-six! [*He enumerates the points of intersection on the line, then sits back down*] [Desargues] is going to consider -- and here is where it gets interesting in the mathematics that I am not discussing -- these six points, [Desargues] is going to show that there is between them a certain proportion between the segments it determines, a certain proportion, a certain rapport between the six points. And what is he going to call this rapport, with a term that will endure in mathematics from Desargues onward? He is going to call it a rapport of *involution*, involution, you remember, of envelopment, a rapport of envelopment as if, in fact, all the projections of the mobile triangle enveloped this rapport. Involution; *involvere*; the envelopment. One might say that this rapport of involution is as if enveloped, folded into each projection.¹⁰ Good. [*Pause*]. Well, ok. From there on, he will pass into the matter of four points; he will pass into his theory of conical sections.

Fine, fine, fine, fine, fine. So, I was saying that this doesn't yet suffice, this definition of the objectile as passage from one form to another, as a metamorphosis of the form. And in other words, the form is constantly in metamorphosis; such is the objectile. The object with variable curvature, the objectile is the object with variable curvature. That isn't sufficient. Why? Because that does indeed give us, that does indeed give us a possibility of defining the point of view anew, of giving a new definition of the point of view. What could one say?

Well, here, I've placed everything in a stack [Deleuze indicates the second drawing on *the board*], circle, ellipse, parabola, hyperbola. I just know that there is a variant, a community in all these figures. Good, but the point of view gives me another possibility: [Jump in the film editing, 90 seconds; access from BNF recording] in fact, it's the case that I placed them in a disorderly way; why? Once we are under a point of view, the question is the possibility of introducing an order into the transformations. In what kind of form, this order? In other words, you see, point of view is that point starting from which I can establish an *arrangement* (ordonnance), and no doubt, there are several arrangements under the same point of view. [There are] several arrangements, yes, yes, yes. For example, I am looking at the cleverness in disorder; I made a list in disorder. What kind of order can I introduce? Let's suppose, I tell myself suddenly: finite or infinite? Finite or infinite, with a question mark? I answer: [Return to film] the point finite, the straight line infinite; the circle finite, the parabola infinite; the ellipse finite, the hyperbola infinite. I have created an alternation of finite and infinite cases. I could have chosen other criteria. For example, are there double points or not? Sometimes yes, sometimes no. Arranging (ordonner) is constituting my series. I have constituted a series of certain points of view. Eh? [Pause] I've constituted my series. The point of view is not only this from which a metamorphosis of the object is revealed, but this from which I am able or become able to arrange cases. [*Pause*] That is fundamentally the point of view: arranging contraries, arranging inverses, arranging opposites.¹¹ [Pause]

Let's find an example so that you feel this, because henceforth... There are as many points of view as you would want. Everything depends on the problems considered. In general, I can say that you can only pose a problem if you are able to determine the point of view according to which you might arrange cases corresponding to the problem.

Otherwise, you've done nothing.¹² What is the point of view that allows you to arrange cases corresponding to the problem? That is, what is going to have us pass into the other aspect, I mean, of the same question. Arranging cases, yes? Sometimes finite, sometimes infinite; sometimes progression, sometimes regression. You are going to create your analysis of cases.

At first glance, says Leibniz, everything happens as a form of an irregular curve, so irregular that one gives up looking for its law. What is the rule? Whatever might the irregularities of a curve, find the point of view, what we earlier called the center of curvature. Finding the point of view in relation to which what earlier appeared to you a crazy irregularity will be revealed as referring to an equation, an equation under which you can organize your cases. Finite, infinite, finite, infinite, infinite; regression, progression, regression, progression, etc. It's not surprising that Leibniz creates in all his mathematics a kind of calculus of problems. And for each family of problem, one will have to find the point of view. An example [is] in astronomy: if you take the planets, you will note an insane rotation. The rotation of planets is such an irregular curve that one must give up on everything, except if you find the point of view. The point of view is in the sun. That works for the planets and for different planetary movements. But if it works for the planetary system, that doesn't work for the star system. One has to find another point of view.

Is there a universal point of view? [*Deleuze shrugs doubtfully*] What does that mean? Here it gets complicated. Is God the universal point of view? Perhaps God is the universal point of view, but he doesn't suppress singular points of view. This is still too complicated for us; we have to leave it aside. Is God a point of view or not a point of view? We cannot answer this frankly; it's a delicate question. But each time we will have to. When you have a problem, either you will say simply anything, that is, disorder in a pure state; or else you construct your point of view such that you will be able to organize, arrange the cases of the problem. Perhaps you sense that the famous texts like Pascal's, in his *Pensées*, on truth, on truth beyond and on this side; what is truth on this side isn't truth beyond, that's not simply the sense of a platitude, a tiny skeptical platitude – ah "what we believed true here, they don't believe it true over there". That doesn't mean "to each his own point of view." Each one having his point of view is the stupidest thought in the world. It's stupid, in the end; that's a frightening platitude even. "To each his point of view, to each his truth."

But if the word "perspectivism" in philosophy is an important term, it's precisely because it never meant that. Furthermore, perspectivism signifies that there is ever but a single point of view from which the truth is stated. That doesn't mean "it depends on the point of view"; it doesn't mean "to each his/her own truth". Perspectivism such as it is realized in Leibniz's philosophy, then taken up again by Nietzsche – and Nietzsche knows very well what he is doing with it because he renders homage, with his own perspectivism, he renders homage to Leibniz. And then in literature, in any another way entirely, undertaken by Henry James... But all these great perspectivists are again all authors that we can call Baroque. Henry James – I can hardly see a Baroque realization of the novel as fine as that of James.

So what do they have in common? At least [they have] this in common: perspectivism has never been a relativism in the ordinary sense of the term. It's not "to each his own truth"; [rather] it's "truth refers to a point of view". All truth in a domain refers to a point of view onto this domain; point of view is the condition for the possibility of truth; point of view is the condition of the possibility for the emergence of truth, of the manifestation of truth. So, above all, don't think that perspectivism authorizes discussion. [Deleuze *smiles*] God help us, it does not authorize discussion.¹³ In a family of problems, *there is* only a single point of view. [Deleuze insists on each word] Which one? You will tell me: what is the criterion? It's quite simple: the one that permits arranging cases. You will tell me: so, there are several points of view. Yes, there are several points of view, notably: the point of view has a site, that is, it runs across a region. So, in fact, in order for me to able to group them together as finite forms, infinite [forms], double point [forms], no double point, etc. - it's the site of my point of view. Understand? But above all, the relativism "to each his own truth", and if you truly want perspectivism, [it's] not even perspectivism of the impoverished; it's perspectivism of the imbecile. [Laughter] It means that perspective, as much in Leibniz as in Nietzsche and Henry James, strictly means the opposite: how to construct the point of view as a function of which I would even be able to arrange opposites. [Pause]. Good.

And I am saying [that] for each family of problems, you must have a point of view. Point of view is the genetic element. It's the genetic element. Let's consider an example in order to be done with my mindless reflections on mathematics. There is something beautiful in Pascal that interested Leibniz considerably. It's the arithmetic triangle.¹⁴ I am going to tell you about it for those who don't know about the arithmetic triangle because we will need it, so I am bringing it up here. You need to remember it because I can then avoid going back over it.

We are going to undertake a strange operation. You'll see. [Deleuze looks at the board] --I've lost my chalk... no, I've got it. [The student on Deleuze's left, Georges Comtesse, gives him a rag to wipe off the board; Deleuze erases drawing 2] -- So, up above... why up above? You place a number 1. Ok? Number 1. So you can take is as the top of the vertex. Then underneath, you put 1 + 1, no, not plus; you put 1 there on the left, and 1 on the right, and that gives you a little arithmetic triangle. And then there [on a third line], you are going to put, staggered, 1, 1. You see? And in between them, you are going to put what? The sum of the preceding level: 1 + 1 which gives you 2. [Pause] Yeh? Good.

Then [*on the fourth line*] you put 1s staggered again. You see how pretty it is, and there [*in the middle*] of this new level, you again do the addition, and you put 3, [*the sum*] 2 + 1 [*from the previous level*]. You place them between the two. You have [*along the left edge*] 1, 2, 3, 4 to this fifth level: 1, 3, 3, 1. And then you sense that you could continue at length. [*Deleuze begins the fifth level with the number 1*] You do the same thing again: you stagger your 1s; you have a triangle of greater and greater length, and there, you put, if you've understood well, 1, 3, 4. You place it between [*the 1 and the 3 of the level four*] and there, [*on the right*] you will place 4, 3, 1, and in the middle, you will place, if you have understood well, you will place 6, or 3 + 3 [*from the previous level*]. It's magic;

that's a magic triangle... and you continue. Her [*a student's*] head is in the way, so I can't go very far... Here, I am going to do it once more [*on the sixth level*]. This triangle is really beautiful. There [*on the left*] you will put 5, 4, 1, and there, in the middle, you will put 10, or 6 + 4 [*from the previous level*], and then [*on the right*], 10 and 5. So, on this level, you have 1, 5, 10, 5, 1. You continue, you continue like at. [*Deleuze sits down*] You have a very beautiful triangle that is an arithmetic triangle.

What is the interest [of this]? If you have a sharp gaze, you will notice that at each level there corresponds -- except apparently on level one where 1 is all alone -- you have overlaid the powers of 2. It's odd, right? This is known by the name Pascal's arithmetic triangle. It's very important since Leibniz will work on this triangle a lot and will develop it as we will see. We are greatly interested in this because he will join a harmonic triangle to it.¹⁵ So, since we know that the concept of harmony is very powerful in Leibniz, we will have to look at this more closely. But we will thus already have a conception of the triangle known as arithmetic.

I said that each level corresponds to powers of 2. The first level 1: 1. If you add it up, that gives you 2 to the first power. The next level is 1 + 2 + 1, 4 [or] 2 second power. The next level: 4 + 4, 8, [or] 2 third power. The next level: 5, 10, 14-15-16 [*Deleuze adds the numbers*], [2] fourth power. Etc. There [level 5]: 20-30-32, etc. You could continue with this, you could continue to infinity, like that. Fine. What have you done? [It's] the genesis of the powers of 2. With what condition? You have found the point of view. What is that? Try to understand. We are in the process of getting the sense of many things.

In the end, point of view is quite close to an act. Point of view is an act, and just as Leibniz understands it, as an act. However, at first glance, I wouldn't have understood [this]. If we hadn't started from the idea that point of view is an act, all that would be abstract. But understand that here, we are beginning to understand perhaps that concretely, adopting a point of view is an act, if it's true that the point of view is what arranges cases. It's what arranges contraries; it's what arranges opposites. I'd say here that your arithmetic triangle is the invention of a point of view. A point of view on what? On the powers of 2. And I will say, what is point of view? But point of view is the superior [number] 1, the vertex of the arithmetic triangle. So, at the outside, I could say, in order to assimilate it to the powers of 2, that it's 2 to the zero power, if this expression had any sense. But, after all, it's this figure that gives it a sense, eh?

So, good... All this isn't finished because you sense that all the problems are rushing in or an entire family of problems is rushing in, notably: can I express any number as a power of 2? [*Doubtful shrug from Deleuze*] And with what condition? It's useless to say that this problem alone propels you toward logarithms. Good... But there are many other problems connected here. From this [*Deleuze points to the arithmetic triangle*] I am just understanding that I can speak of a point of view that permits arranging the powers of 2. There you have typically an arrangement of the powers of 2, just as I can speak of an astronomical point of view that arranges planetary movements; just as I can speak of a point of view in physics, a point of view on an inflection and a site of this point of view, etc. But I am saying that out of this, it's not simply a question of metamorphoses. It's a question, a question of anamorphoses. For all this, on metamorphoses and anamorphoses, I refer you, of course, to the research of [Jurgis] Baltrusaijtis, but I am just trying in this way not to say a lot about that because it's going to... It would be better to see it in books, from engravings, all that. What is an anamorphosis, and what is the difference from a metamorphosis? It's that metamorphosis is always the passage from form to form; it's like a connection of forms; it's the passage from a profile to another profile.¹⁶

For example, a metamorphosis, but the Baroque world is full of metamorphoses and anamorphoses. I recall, in Fascist Italy, there was a great Baroque tradition, a grand tradition of metamorphoses, in propaganda, in which there were portraits. That struck me because it was impressive, these portraits. They were quite popular. Everyone was buying them. These were portraits. I was fascinated by them because I wasn't very old and I looked at them and I wondered, how can we explain something like this? But since then, I figured it out: these were portraits on slides. So if you placed yourself in front of the portrait, you have Mussolini; this was the central perspective, where you had Mussolini. You put yourself on the right – you see, it was painted on slides, produced on perpendicular slides, like that. So, when you were in front, you had Mussolini, of course, it's the central perspective, [where] you had Mussolini. And then you move to the right and there, you had I don't remember which officer (maréchal). The slides... On the length of the slides the officer's head was painted so that, from the right, you saw the officer, and no longer Mussolini. In order to see Mussolini, you had to come back to center. [Laughter] There was the officer on the right, and then to the left, there was another officer, the officer on the left, eh? -- It astounds me that these haven't been reproduced recently, especially since... eh? I don't know... [Laughter] So you understand. Obviously, there's a problem for the center, who will we put in the center! [Laughter] –

But understand that at the point we've reached, we have moved beyond the stupidity that would consist in saying, oh well yes, each person has his/her point of view. This isn't at all, this isn't at all what's in a Baroque world. It's not that the point of view changes all that much. The point of view doesn't change; the point of view has a site. The point of view's site, in my triple photo, in my triple image, the point of view's site is going to be from center to right and to left. Simply, [*Pause*] the point of view gives me the law of the form's transformation. There is metamorphosis. And when I was saying "power to arrange cases", this is just as well [the power] to hierarchize cases, with Mussolini in the center, you see? [*Return to film track*]

I am saying: when do we speak of anamorphosis? It seems to me that we could reserve anamorphosis... I'm not at all saying that this is... It's as you like, eh? We could reserve it [anamorphosis] for this, for a case that is deeper than that of metamorphosis, specifically: when there is an emergence of form out of the unformed. It's no longer the passage from one form to another; it's how there is an emergence of form... how there's an emergence of form out of the unformed. What does that mean? In appearance, everything is disorder. In appearance, all is disorder. You recognize nothing there; it's all completely messed up. You have a movement; you have an inflection; you have a series of inflections that are going in all directions, changing centers constantly. You recognize nothing there. Good. But the point of view is what is going to extract a form from this disorder. It's no longer what passes from one form to another, from one profile to another; it's what is going to extract any form at all from a non-form. A well-known type of anamorphosis is in the painting by [Hans] Holbein [the Younger], "The Ambassadors".¹⁷ Under a bookshelf you have a kind of indeterminate stain, really informal, a formless white-ish stain. And from a certain point of view, linked to the lower edge of the painting, from a certain point of view, everything arranges itself. This white-ish stain obviously represents a skull that is the painter's signature since [the name] Holbein refers to "hollow bone" or "skull". Good. One could say, you see, both that it's the point of view initiating an emergence of form starting from what has no form, and also a passage from form to form.

There really is a relativism of point of view; the truth is relative to the point of view. But that has never meant that the truth varies with one's point of view. That has always meant that the truth... Point of view is the condition of possibility of the manifestation and the constitution of truth in a domain, the domain of the point of view, the domain corresponding to the point of view.

So here we have henceforth [*Deleuze turns over a sheet of paper that he seems to use as a guide; he heaves a huge sigh*] Aaaaaahhh... On this point, in our problem, we have moved forward. We have indeed outlined this notion of point of view. We have discerned the contradiction not to be made about point of view. Understand? We still have left a final point to look at, good, since the status of the object changes. If the object becomes objectile under the point of view, well then, it's probable that the status of the subject also changes.¹⁸ The subject is itself a point of view. Point of view is the subject. The point of view is the subject. A subject is a point of view. A subject defines itself through a constitutive act, and this constitutive act is the point of view. Also the subject has a site. It's the region over which its point of view travels. And in this, perspectivism is fundamentally Baroque.

And we should find a name then to emphasize this change of subject's status no less than the change of the object's status. The object becomes an objectile insofar as it is affected by the variable curvature or by the group in transformation. We will say about a subject that it becomes a *superject* [*Laughter*] insofar... [*Deleuze reacts to the laughter*] It's funny, but not very... It's a superject. Why do I say superject? That is, for the couple object-subject, Leibniz would substitute, but alas without saying so, the couple objectilesuperject. If I call upon these terms, it's uniquely to emphasize that object-subject is going to take on a completely new sense in philosophy with Leibniz.

And... Superject, ok. Here I am only borrowing a term. The idea that the subject would be a superject is an idea that you will find textually and explicitly in the work of a very great philosopher from the start of the twentieth century, [Alfred North] Whitehead.

[*Deleuze spells out the name*] Whitehead is one of the great philosophers of the twentieth century, and who proposed the term superject. Why place Whitehead into Leibniz? For a simple and definitive reason: Whitehead considered himself Leibnizian. So, we have every right, or we are comforted in advance if we propose this pair objectile-superject in order to define the new status of the object and the subject as it appears in Leibniz's philosophy.

When the object becomes objectile, that is, encounters a group in transformation, the subject becomes a superject, that is, becomes a point of view. [*Pause*] Hardly have we won this point than everything vacillates. But in what sense can we be called point of view? You, me... For example, we see it well there. [*Deleuze turns and points to the triangle on the board*] 1 is a point of view onto the generation of the powers of two. Good. The sun is a point of view on planetary movements. Good. But you, me, we are a point of view on the world. Agreed, we are a point of view on the world. We are a point of view on the world of view on the infinite series of the world, yes, since any point of view is onto a series, the series of powers of 2, series of curvatures. Any point of view, I would say – and this is why we had to call it a superject – any point of view subsumes a series. Which series? The series of transformations through which the objectile passes. Notice that this works out nicely; it's very satisfying for the spirit. [You] sense it: the world arranges itself. Good. I repeat because it's so satisfying even, but I repeat: well... yes, no, I no longer know. It doesn't matter.

I am saying that everything vacillates because... well... If it's true that every point of view... Ah yes, I wanted to say... If it's true that every point of view is defined in relation with a series, specifically the series of transformations through which the objectile passes, I can say that each of us insofar as the subject is a point of view on the world, that is, on the series, parenthetically infinite series, of the world.... Good... well, yes, but it's not simple. We believed that we understood, but we must shift to us, us, us: how is it that we are points of view on the world? What does that mean?

Leibniz seems to guide us. He says, "We are like points of view on the city. Each of us," you will see, "is like a point of view on the city." These texts, you find them everywhere in Leibniz, notably in the *Discourse of Metaphysics*. [*Pause. Deleuze consults his notes, then opens a book, finding a sheet of paper that he reads*] Here we have a text on this: "As the same town looks different according to the position from which it is viewed."¹⁹ We are points of view on the city. Notice that this is what is our rapport to the world, our rapport with the world, that is, the rapport that we maintain, we subjects, or superjects, with the infinite series of transformation; it's a little like how a single city is diversely represented.

What does that mean? Does that mean... What does that mean, "we are points of view on the city"? Why didn't he say, "We are points of view on the countryside"? [*Laughter*] You will tell me, don't exaggerate. He could have said, we are points of view on the countryside. I only feel strongly about one thing: showing that he couldn't say "we are points of view on the countryside". He could only say "we are points of view on the city". This is once again why Leibniz is unusually modern. There were already no longer

any countrysides, I mean. But why? Well, this is where we have... Are you tired or not? Do I continue or not? [A student suggests a recess, a pause]... But without out moving around, ok? Because you won't come back if you... [Pause. Deleuze looks at the film crew] Is the sound ok? It's ok? Yeh? Ok ? Do you want a break ? No ?... In any case, just stay here; just sit and reflect. [Laughter; Pause... A jump in the film editing, no omission]

[1:35:23, *RAI-3*] So this is where we are. All that is very fine: we are points of view on the city. But what does that mean, or rather what does that *not* mean? At first glance, if I dare say, this could mean: for each point of view there corresponds a form or a profile. If you look at the city from a particular point of view, it has a particular form or it offers you a particular profile. Good. This would be the simplest interpretation; it would be the first interpretation. Only here we are, it's simple, but it's impossible. If that's right... And yet, I am telling you, beware of texts. Leibniz seems to express himself this way. Each subject has a point of view, and to each point of view a profile of the city corresponds. If this is that... No, this cannot be that, it cannot be like that for multiple reasons. But the principal reason why it cannot be like that is because, once again, this is a feeble idea, and Leibniz cannot have a feeble idea. That [first explanation] drops us back into a false perspectivism, of the type "to each his own truth."

But there's a more solid reason why that couldn't be [the interpretation]. Confront the proposition [Deleuze turns toward the board] "I am a point of view on the city," [He indicated the vertex of the arithmetic triangle] at the vertex 'S' of the cone, the point of view. Can I say that the circle corresponds to a point of view? The ellipse, to another point of view? The parabola, to another point of view? Of course not, I certainly cannot say this. You remember? It's not a question of saying that for each form there's a corresponding point of view or... I haven't changed the point of view when I pass from the circle to the ellipse. [Deleuze insists on this next sentence] The point of view is what gives me a hold on the passage from one form to another. It's what I call the group in transformation. The point of view causes the group in transformation to emerge, that is, the passage from one profile to another. That which corresponds to the point of view is not one particular form or another; it's the change of form, [Pause] that is, the objectile, the object insofar as it traverses [Pause] its group in transformation. You see? It's not a question that each form corresponds to a point of view, not a point of view to each form since the point of view allows me precisely to arrange the forms and to pass from one to the other. Here, it is necessary that this be very clear.

So I have no choice, even if Leibniz seems to express himself sometimes this way. You know, Leibniz is astonishing. He said it a thousand times; he measures his texts to the supposed intelligence of those reading him. So, when he wants to be understood by everyone, he speaks quite simply; and then, when he has a small audience, he goes farther. He doesn't care since, for him, every level symbolizes one another. So it's a matter of knowing which level is deeper than another. Hence, I am saying [that] it's not a form that corresponds to a point of view. It's not possible since to every point of view corresponds a change in form, that is, a power of arranging forms and of passing from one form to another. Fine. So, I would say [that] the point of view is what reveals the connection of profiles or the change of form, the passage from one form to another. If

there is no point of view, I could never grasp it. If there is no point of view, well, the circle, the ellipse, the parabola, the hyperbola will remain eternally separated each on its own, each form separated from the other form. If I have a point of view, then yes, I can create the synthesis of curves in the second degree. You understand?

But then I have hardly made this first rectification, and I fall back into a difficulty: but why would there be several points of view? And how is it that I am a point of view distinct from you? How is it that each of us is a point of view distinct from other points of view? This is the necessity of a third level, and this gets complicated. [*Pause*] At first glance, it suffices to find a point of view at least in a domain under consideration. But why is there a necessity for a plurality of points of view? I have just shown that every point of view seized onto a series, and probably – there's no need to pose a lot of hypotheses – and probably an infinite series. If I am a point of view on the world, I grasp an infinite series that is the series of the events of the world, that is, a curve with variable curvature in which each center of inflection, each point of inflection marks an event. Each point of view grasps not this form, not that one, but the infinite series.

But why several points of view? Why is the point of view irreducibly plural? In other words, not only has Leibniz transformed the notion of the subject in philosophy, but he is the first to introduce the plurality of subjects as a metaphysical problem. If you take the thinking subject in Descartes's work, certainly each of us undergoes the operation of the *cogito*. But we cannot say that in Descartes, the plurality of thinking subjects is constructed into a metaphysical problem. We can posit this, wonder what the status of thinking subjects in Descartes might be, but to my knowledge, we cannot find an answer to this solution, to wit: the answer that there are several thinking substances. But making the plurality of subjects into a legitimate problem (*problème de droit*), it's Leibniz who introduced this problem into philosophy.

So, you understand: I cannot say [that] for each point of view corresponds a form separate from others since, once again, the point of view seizes the metamorphosis of forms. So what distinguishes one point of view from another? What is going to distinguish one of you from me, two points of view? [*Pause*] We don't have much choice. These are the beautiful moments in philosophy. You can't go backward. A same series must indeed be susceptible to variations. A same series must indeed be susceptible to variations. A same series must indeed be susceptible to variations. A same series must indeed be susceptible to variations.

So good, that gives us something: a series is susceptible to variations. What does that mean, variations of a series? I am not seeking definitive definitions. We are still operating on a kind of intuition, and we are in the introduction to Leibniz, so we cannot ask too much from ourselves. But I am telling myself: let's use a comparison that is going to... and that entails a great danger, but in the end... Each of us knows that there is a kind of music operating with series. It functions with series of twelve sounds, with the series of twelve sounds. Everyone knows that [Arnold] Schoenberg's name is linked to this music. Fine. Well, what happens there? [*Jump in the film editing, no omission*] And what are the variations introduced by Schoenberg into the series of twelve sounds?

First type of variation: you can take fewer than twelve sounds, that is, you don't take them all. I would say that here, it's a purely arithmetic variation.

Second variation: a variation called melodic... no, called rhythmic. You keep the same series twice, but you transform the durations. You respect the intervals, but you transform the durations.

Third variation, melodic: you transform the intervals. [Pause]

Fourth variation: you transform the ascending movement into descending movement, and the descending movement into ascending movement. [*Pause*]

Fifth variation: recurrent movement, that is, you begin at the point where the preceding series ends. You invert the series. Fine.

There you have variations of the series. I would say that a same finite series contains a finite number of variables. I can say that an infinite series contains an infinity of variables.

Do we not have our solution? Specifically, yes, each of us is a point of view on the infinite series of the world. Only here we are: each of us grasps a variable of the series. Each of us grasps a variable of the series. Each time, the entire series is there, fine, but as this or that variation. Here is what it means [to say] "Each of us is a point of view on the city". Each of us grasps the infinite series of profiles of the city; it's not at all "to each point of view a profile corresponds." Each of us grasps the infinite series, but as this or that variation. This will yield an extraordinary figure that you are going to encounter constantly in Leibniz. Each subject, each of us, grasps the entire world as infinite series. There you are. Only as we see, this does not mean that each grasps it clearly. It's in my own depths – you sense the return of the theme of the fold – it's in my own depths that I grasp the entire world. Complete this: it's understood in all this [that] these are things that we cannot yet understand, but we can anticipate them. I am not conscious [of the entire world]. [*Pause*] It's in my depths; it's in a folded form. Fine. No matter.

Each of us grasps the totality of the world as an infinite series. Yes, but each only grasps clearly a tiny portion, such that the clear portion allotted to me is not the same as the clear portion allotted to you. And if there is a plurality of points of view, it's because there are as many variations of the series as there are clear portions. What I grasp clearly, you only grasp in an obscure manner. Everyone gets even with somebody, eh? Everyone gets even with somebody (*à chacun la revanche*). What each of you grasps clearly, the others grasp, yes, but in an obscure way.

Once again, I could say that the clear region is the site of the point of view. The tiny clear portion that I grasp in the world is the site of the point of view. Each point of view has a site, my tiny portion of clarity. It's a prodigious idea; it's a fantastic idea, you understand? We are points of view, yes, but do you understand what that means? There's

a tiny domain of clarity – we cannot ask for much more – and then that opens up a whole hierarchy. Do animals have a soul? Well obviously, animals have a soul; these are points of view, animals. There is the butterfly point of view; there is the elephant point of view; there are all of them. These are points of view. So they all do not grasp much clearly. There is a hierarchy of souls, fine, of souls. So a little child? [*Doubtful shrug from Deleuze*] Yes, a little child, it's indeed a little child, but in the end...

What do I grasp clearly? Here I don't want to say too much ahead of time, but you sense that all of Leibniz is engaged in this. What I grasp clearly is finally what relates to my body. Why do I have a body? I don't have a point of view because I have a body; I have a body because I have a point of view. There is a deduction of the body starting from the point of view. Why do I have a body? Because I only express clearly a tiny portion of the series. Otherwise, I would be a pure soul in the world.

I only express clearly a tiny portion of the series. Fine, yes, yes, yes, yes, yes. But precisely, that's what having a body is: I have a body *because* I express clearly a tiny portion of the series. And what I express clearly is precisely going to be what affects my body. Who grasps clearly the passage of the Rubicon? One single subject: Caesar. Yes, I grasp the passage of the Rubicon, no less than Caesar, yes, no less than him. It's in me like it's in Caesar. And in fact, that concerns Caesar's body. Caesar had to take a longer step in order to cross the Rubicon. That concerns his body. Fine. No matter. That's what the variations of series are.

I can say, yes, and I have solved my problem. This sentence that seems so inoffensive, "each of us [is] like a point of view on the city," is in fact extraordinarily complex since it implies, first, that it's false that a profile or a face on the city corresponds to each point of view; second, since it's true that every point of view grasps the whole series; and third, since there are no fewer multiplicities necessary for points of view since the whole series is necessarily affected by an infinite sum of variation such that to each point of view, a variation of the whole series corresponds. [*Pause*]

Understand? So, we are almost done. We can't take too much more, in any case. You understand me still, because there's not point for me continuing if you no longer understand? Yes? I can continue? It doesn't matter to me; I can start up again the next time. So let's try to continue just a little bit more. So... We are getting close to the goal, eh? We are getting close to the goal. Understand?

My purpose today was to go from inflection to inclusion. Inflection is the characteristic of the variable curvature under the form of infinite series. And I was saying that this is the genetic element of the fold. The variable curvature is the genetic element of the fold. And I continued by saying that if things are folded, this is why God never acts in vain. Eh? It's a great principle of Leibniz: God always does everything for the best. If God pleated matter, it's not just for fun; it's for a final cause. It's by virtue of a deep finality. If the world is not a straight line, if the world is not rectilinear, it's not by chance. If mathematics are mathematics of curvature, it's because the world sings the glory of God, as has been said. And what is the final cause of the fold? I was saying: inclusion. Fine.

Folding means placing within. And then we bump into "placing within". Fine. But placing within what? So this is going to return to us; this is going to cause us a final difficulty about the point of view since we have to answer now: it's placing within the point of view.

And good... Ooo la, la, but then there is the view in the point of view; there you have the visible in the point of view. The visible is in the point of view. The visible is included in the point of view. In fact, the infinite series of forms is in the point of view. This inherence, *in esse*, that is, "being within," being in the inclusion, how do we show that it belongs to the point of view to contain the visible? Leibniz shows this in the simplest and most infantile way possible. And this infantile manner is not even by itself mathematics although it seems to be, and does not imply differential calculus, but it presupposes the mathematics of differential calculus. For a brief moment, it [the mathematics] borrows, on the other hand, the language that is fully developed in differential calculus.

In fact, to show this, Leibniz will say two things. He will say, first case: you take a right triangle... You take a right triangle... No, not even a right triangle. You take a right angle, excuse me. You take a right angle, like that. [Deleuze makes an 'L' gesture in the air] -- You see, I am only drawing in the air now; it's better than going to the board. This way, everyone can see and then immediately forget. -- Like that. I draw an arc, the arc of the circle, you see? So I have A: the vertex of the angle, and B-C, the extremities of the arc. I draw an arc that's narrower inside. It's still an arc that refers to the right angle. I draw an even narrower one, even narrower. I am getting close to the infinity of the vertex 'S', and I say: where does the right angle begin? Still, this is not mathematics. This calls on mathematical language, founded by Leibniz, in fact, but here, it's quite simple: where does the right angle begin?

[Jump in the film editing; *Deleuze is looking into a reference text from which he reads*] In 1700, from 12 June 1700,²⁰ I will quickly read to you: "It is evident that this angle is not only measured by the great arc B-C-D, but also by a lesser F-G, however small it might be, and the opening begins in one word," the opening of the angle, "begins in one word: from the point A that is the center," that is the vertex of the angle, "it is also in this very center that the angle is found, such that we can say that these arcs are represented in the center by the relation of the inclination to the center." This would be very useful to me if we had the time to comment on it, for the relation of the inclination, that is, of the inflection to the center, is what we had analyzed as today's departure point, specifically the center of curvature. In other words, the angle is already in the vertex of the angle.

Second text: it's not only the right angle in the vertex; it's an infinity of angles, an infinity of angles that are in the point, since you can always take an infinity of angles that coincide through their vertex. And this does not bother us since I remind you that every point of view has a site, that is, a region, a region of displacement. This is why one must not say "to each immobile point of view corresponds a form," since the point of view is not immobile. The point of view has a site that designates its path (*parcours*), its limit,

the tolerance of its path before arriving at another point of view. Many angles, an infinity of angles, can have a common vertex. [*Pause*]

In other words, the connection of visibles is in the point, or as Serres puts it quite well, when the point becomes point of view, space is in the point. It's no longer that point that is in space. This is the kind of revolution about which Leibniz dreams in opposition to Newton. It's not the point that is in space; it's space that is in the point. In fact, sense how much this is a new theory of space that will then have an impact on all mathematics after Leibniz and even today, specifically space defined as the order of points of view. This we are still unable to understand, so we will come back to it when we reach our discussion of space in Leibniz. But space can only be the order of points of view to the extent that the point has become point of view. An immediate consequence: space cannot be substance. There is no extended substance. Space is an order; it's not a substance.

Good, but ok, here, really this goes too far. I am only saying that we have just established the idea that, in fact, point of view is perfectly able to serve as the subject of inclusion. Something is in the point of view, exactly as the infinite series of angles is in the vertex that they have in common. [Pause] Fine. In other words, the world is not only an infinite series; it is included in each point of view, that is, it is included in each of us. [Pause] It is included in each of us. Yes indeed. What does that mean? This is strange because, understand, this seems to completely contradict the idea of point of view. Point of view seemed to be a point of view by nature onto something outside. There is no longer anything exterior to point of view. Yes there is, there is something exterior to point of view, it's the other points of view, but nothing else. The city does not exist; we have to go all the way there: the city does not exist outside the points of view onto the city, such that the city is what? It's not an object since there are no longer any objects; there are only objectiles, the series of profiles. It's not an object such that the city is what? It can only be the accord of points of view among themselves. The city is identical with the assumed accord of points of view onto the city. The city is in the points of view; it does not exist outside. In fact, the city is always folded, and to be folded means *existing within*, it's *being included*, being included in the point of view. The city is included in the point of view; it does not exist outside the point of view that includes it. Fortunately, outside the point of view, there is the other point of view, the other points of view such that the city is never an object since every object is objectile, but the city is the accord of subjects, or of points of view, that is, of superjects.

What can we call the accord of subjects other than by its true name, to wit: God? Well, what? Yes that's it. It means that the point of view is open onto nothing outside. The point of view is not open onto an exteriority; it is regulated, regulated from within in conformity with other points of view. How do we talk of this? Something like the world is a cinema, the world is an Italian theater, a décor in transformation. The world is a cinema. Or else we may perhaps have to say something worse, even more included because cinema still refers to an outside. Cinema refers to an outside because it is quite obvious that something has to be filmed. So after, the film gets folded, and then it gets unfolded. But there is still a reference to an exteriority. One had to eliminate any references to an exteriority. This is what Leibniz says to us from the start of the

Monadology, in a famous text: "the subjects and points of view", it's strange, "are without doors nor windows." He says "monads", a word that I have not yet used since I would then have to explain it, so I am keeping myself from using it. But I am saying more simply that each subject is without doors nor windows. It grasps the infinite series of the world, but this series is within it.

And why is each subject without either doors or windows? At the start of the *Monadology*, [Leibniz] tells us: it's that – you remember? – subjects are Simples (*les Simples*) as opposed to composed matter. Well, that which is simple can receive nothing from outside. Why [is it that] what is simple can receive nothing from outside? For a simple reason: if a Simple received something from outside, it would at that moment form a Composite with what is acting upon it. So, if there is something simple, this Simple can receive nothing from outside, so Leibniz tells us. This is fine, very fine, and logically unassailable. If there is something absolutely simple, it can receive nothing from outside, which comes down to saying that everything must be located within it. It has neither doors nor windows.

So notice this, it's amazing! This shows well the question of Leibniz's levels. He comes to speak to us of point of view, first moment, and today we have crossed through all sorts of levels. First level: we are points of view. We understand that there are points of view on the world, yes, on the infinite series of the world. Ah, but be careful: the infinite series does not exist outside each point of view, under one variation or another. Henceforth, there are neither doors nor windows. Everything is in the point of view; the entire visible is in the point of view. So, that leads us to rectify Leibniz's texts. But we are not the ones rectifying them; he rectifies them himself. We readers of Leibniz, we have to reconcile his two major propositions: "We are points of view on the city" and "We have neither doors nor windows." There is only Leibniz who understood here as well the stupidity of problems of communication.

"We have neither doors nor windows." So this is not bad. We will see the consequences for communication. This is what Leibniz will call the problem of the communication of substances, once we've said that all the units, all the points of view have neither doors nor windows. But then that leads us to correct the notion of point of view. Leibniz began by telling us, in the *Discourse on Metaphysics* [section 9]: "each subject is like a mirror," each subject is like a mirror on the world, a mirror of God or of the world. We are in a position to add something: it's not just any mirror. It's a concave mirror, and that seems indispensable to me. When Leibniz speaks of a mirror, it can only be a question of a concave mirror because we saw that inflection referred to a center of curvature on the side of concavity, under the vector of concavity. But a mirror assumes a real object. So the metaphor of the mirror is only valid at a certain level.

Second point: he said "We are points of view, points of view on the city," and he linked the two statements – mirror and point of view – when he says, for example, in a letter [*probably a letter to Arnauld*]: "Each monad," no matter, each subject, "is a mirror of the universe according to its point of view." There you have both together: the metaphor of the mirror and the theme of point of view. Each person is a mirror of the universe according to his point of view. But a point of view implies an outside; it implies a window. It's useless to tell you that in point of fact, the window looks out on the countryside.²¹ That matters a lot because the countryside is always on the side of convexity. The countryside is convex. It cannot be otherwise. So, good. If I have a window, I am looking onto the countryside, yes. Only here we are: I have no window. I am a point of view without a window. So I say: mirror, point of view, but no window. So, let's consider cinema: I will be like a lined room, with a screen; it's no longer a mirror, but rather a screen that is needed, where the film, folded, unfolds onto the screen, would play out onto the screen. And each of us would have his/her film, and the accord between the points of view would be the accord of films between each other. This isn't bad. But that doesn't work because a film still had to be filmed, produced. The screen still doesn't work. There is still too much reference to an exteriority. The screen still implies a window. We have to close the windows even more.

What's left for us? So here as well, I am doing what I did earlier with Schoenberg; while begging you not to take advantage and use this badly, I am making a very arbitrary rapprochement, fine, something like... that implies no reference onto the exterior, so-called digital images (*images numériques*).²² Ah yes. What the point of view takes hold of, what the point of view grasps, is what has no existence outside itself. Or if you prefer, images without models, a pure genesis, that is, digital images; or if you prefer, Leibniz's model, the model that's rigorously suitable for Leibniz: it's not the mirror, nor the window, nor the screen. Eh? He will pass by the mirror and the window, and he will reject the window. You see, at the start of the *Monadology*, we have neither door nor window. Good. Neither mirror, nor... This isn't adequate. None of the three terms is adequate.... Neither mirror, nor window, nor screen. So then what? And what are we draped with, us, if we can use this terms since we are units (*unités*)? Can we say "the walls of a unit"? What are these closed, opaque walls? Let's call them information grids (*tableaux d'information*).

The subject is not open onto the exterior. It is in communication with an information grid that corresponds to it, and data are inscribed onto this grid. And on my very own information grid, certain bits of data are inscribed. On the information grid for one of you, other bits of data are inscribed. Is there a world? Yes, there is a world if the information grids align, if there is a concordance of information grids. Where would this concordance come from? That's something we cannot know at the moment; we won't even ask ourselves that. We say: I don't open my window on the outside; I consult an information grid. So there, I consult within myself. I consult an information grid within myself; I don't open my window. What is this ? It's the city. Why is that the city? The city is in our heads, you know? The city, this is marvelous, the city; as has been said, it's a brain, the city. And it's not only that: a monstrous brain, a disgusting brain, that is, an information grid. Yes.

This is why I believe that it's not by chance that the phrase "a point of view onto the city" flows from his pen. A point of view onto the countryside, this is [from] the window. But here, I don't even open my window in the morning. There is no longer any need for windows. There are people without windows. If I want to know the temperature, I have

two ways : the countryside way, I open my window and even risk sticking my arm outside; then pulling it back in, I close the window. Fine. But otherwise? Otherwise, I have a dedicated thermometer, with a wire going inside, and another inside, with two readings; and I look at the thermometer, and I know simultaneously the temperature inside the house and the temperature outside. This is already the start of an information grid. Some bits of digital data are inscribed on my information grid. Neither door, nor window. I have a monologue with myself: "Ah, wow, it's cold." But I haven't opened my window. This is the regime of information grids in the city.

"We are points of view onto the city." You see what that means now. That means: being a point of view is reading an information grid. Simply, I always have information that the other does not have, fortunately. Each person has his/her own information. All that could create discord. A singular harmony is required for all these kinds of information even to come into a vague concordance. Here too, even at the cost... I am making jumps to try to ... Above all, don't take all this literally; we are in an introduction, so given that, I did not mean that Leibniz is a precursor of Schoenberg, especially not that. I used Schoenberg to make something small understood. I don't mean to say that Leibniz is the precursor of modern painting, but there is a point that is striking in modern painting, and it has been emphasized – I spoke about it in past years: it's how the canvas changes status, how the canvas has changed status, that is, how for a long time, the canvas was like or called for a window on the world. [*Jump both in film editing and the audio recording*]

In what we call modern painting, I'm not saying this would be better, but sense that there is no longer a window onto the world. Take what's known as abstract expressionism which has been something fundamental for launching a painting called contemporary. Fine. Is a painting by Pollock a window on the world? And it's not only the question of figurative or not figurative. It's not this that... A line by Pollock – I am mentioning this for those who see what I'm describing – a line by Pollock obviously is not a window onto the world. It's what? It's inscribed onto an opaque surface, of what type? Say, this interests me because if there is a painting of inflection, and of inflection with variable curvature, it's indeed Pollock's lines.²³

But then, in what sense does that develop? That develops more and more in the form of... The line is inscribed onto a kind of information grid, either a temperature curve [or...]. The question becomes not "what do I see through the window?", but "what kinds of information does the painting communicate to me?" The painting has become an opaque surface that functions like an information grid. And perhaps, as an American critic has said, in a very lovely article,²⁴ the person through which that appears the best, where the genius of painting appears the most profoundly, is Rauschenberg. No doubt, it's with Rauschenberg that a new status appears. I am not at all saying that he invents it all at once; it's once again because Pollock and all those who preceded Pollock… One would have to create an entire history of this mutation of the painting's status.

But you find yourself gazing at a famous painting by Rauschenberg that shows a line of inflection on the opaque layer that covers the painting. Or sometimes he creates forms

from cut-up newspapers. These are not at all collages, understand: he uses printed matter as backing. One can no better underscore the painting as an information grid. And this is how he creates his painting, a kind of infinitely sinuous line, a line of infinite inflection with numerical data, and numerical data in all the senses. An information grid, in fact, no longer knows high or low, right or left. A window, yes, a window has a high and a low, a right and a left. One window refers to a horizontal man; an information grid no longer refers to a horizontal man, that is, there is liberation of the point of view in relation to any frontality. Good, and this painting I am thinking of, the famous one by Rauschenberg, as its line and its numbers, and from it emanated a pictorial power in a pure state and leaves us with this question: "What information does this painting convey to me?"²⁵

So I would say that here, we have something like an approximation of a realized Leibnizian world. In what sense? I just wanted to say, there, in what direction we have today fulfilled our short portion, the task we gave ourselves, specifically: the last time -Ireally want you to sense our progress, how slow it is; you have to sense this – the last time, once again, we had been on the first floor of Baroque architecture, not the lower floor, but the upper floor.²⁶ We've moved from inflection, from curvature to the infinite series. And today, we've moved from inflection to inclusion. Inflection included itself, is included in what? Inflection is included in a point of view. On what condition? On the condition that point of view be grasped without reference to a supposed exteriority and only with reference to other points of view, that is, that the model not be the window, but the information grid, as an information grid, a play between terminals, whatever you like. You can act stupidly (*déconner*), you can say whatever since, from the moment that you don't insist on it, there's no point doing so. Leibniz's fundamental statement, to support all this: there is no window. So I believe myself to have answered the question: in what sense can we consider that inflections are included in points, in points defined as points of view?

So go reflect on all this and tell me about it next time. And then, I stared into the camera, eh! [*Deleuze smiles; someone says something inaudible to which he responds*] I hope so, I hope that I didn't ruin it by looking into the camera... So there we are; thank you very much. [*Deleuze begins to relax, rolling his shoulder, visibly wasted, and he emits tiny groans, saying*] Tired...

A student: It's the heat that does that do you.

Deleuze: The heat... the filmmaking... [*The students start leaving; there is a jump in the film editing, and we see Deleuze nearly alone in the classroom, dressed in hat and coat, and he says*] This was all cinema! [*Someone suggests something inaudible, and he answers*] You want me to fall? [*The camera follows Deleuze as he leaves the room*] Fine, so long! [*He turns left into a corridor, and then leaves the building onto the street, and says*] There we are, it's recess. That's it! [*Jump to black*] [Audio: 2:31:26; Video: 2:28:04]

Notes

¹² On the question of "problems" in philosophy, see *L'Abécédaire de Gilles Deleuze*, "H as in the History of Philosophy".

¹³ On the futility of "discussion," cf. What Is Philosophy? pp.28-29.

¹⁴ On this term, cf. *The Fold*, p. 21, p. 46; *Le Pli*, p. 30, p.62.

¹⁵ On this triangle, cf. *The Fold*, p. 129; *Le Pli*, p. 176.

¹⁶ Here begins a three-minute passage that was deliberately edited from the film and is only accessible on the BNF recording, perhaps because of the subject given in the example, given that the film is an Italian production for RAI.
¹⁷ On Baltrusaijtis, anamorphosis, and Holbein, cf. *The Fold*, note 12, p. 145; in *Le Pli*, the corresponding

¹⁷ On Baltrusaijtis, anamorphosis, and Holbein, cf. *The Fold*, note 12, p. 145; in *Le Pli*, the corresponding note, 11 (p. 27), refers only to anamorphosis.

¹⁸ On these aspects of point of view, subject and object, cf. *The Fold*, pp. 19-20; *Le Pli*, pp. 27-28.

¹⁹ *Discourse*, p. 5, #9.

²⁰ Letter to Sofia, cf. The Fold, note 18, p. 146; Le Pli, note 17, p. 30.

²¹ On the countryside perspective, cf. *The Fold*, p. 27; *Le Pli*, p. 38.

²² Deleuze makes a brief reference to this same example at the start of chapter 3 of *The Fold*.

²³ On Pollock's line, see the Painting seminar, session 2, April 7, 1981.

²⁴ The reference is to Leo Steinberg, cf. *The Fold* and *Le Pli*, chapter 3, note 2.

²⁵ For a brief reference to Rauschenberg's work, cf. the start of *The Fold*, chapter 3.

²⁶ This refers to *The Fold*, chapter 1.

¹ This is a reference to the seminar titled *A Thousand Plateaus* I, linked to the Deleuze Seminars site, from 1975-76.

² This opening review corresponds to chapter 1 in *The Fold*.

³ This reference is to the first figure on p. 15 in *The Fold*.

⁴ For the introduction of point of view and its linked terms, cf. *The Fold*, pp. 19-23; *Le Pli*, pp. 25-30.

⁵ On Desargues and these distinctions, cf. *The Fold*, pp. 20-22; *Le Pli*, pp. 28-30.

⁶ www.earlymoderntexts.com/assets/pdfs/leibniz1686d.pdf, para 14, p. 9.

⁷ Cf. *The Fold*, p. 21; *Le Pli*, pp. 29-30.

⁸ Cf. *The Fold*, pp. 18-19; *Le Pli*, pp. 25-27.

⁹ Deleuze adraws a triangle on the board. This drawing corresponds to the image in *The Fold*, p.21; *Le Pli*, p. 29.

¹⁰ On involution, cf. *The Fold*, p. 21; *Le Pli*, p. 29.

¹¹ On arranging, cf. *The Fold*, p. 21; *Le Pli*, pp. 29-30.