

**Gilles Deleuze**

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

**Lecture 01, 28 October 1986: Introduction: Pleats and Folds**

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

**Part 1**

Good, so we're off. [*Pause, room noises*] This year, I am proposing the following topic: Leibniz as Baroque philosopher. So you will see if you will continue to come. Those who do continue to come, I am asking an assignment of them during this year ... Well, it's not even an assignment. It's a way of following the reading selected from anything written by Leibniz, whatever you like. It's fine if you don't know what [to choose]; I am proposing a choice from two very short works – Leibniz wrote a lot of small works – either the *Monadology*, it's quite small, you see? But I have a small edition; one from any publisher is fine. [*Deleuze looks at one student's edition*] In one year, that's readable, [*Laughter*] the *Monadology*, or else [try] something a bit larger, but not much, the *Discourse on Metaphysics*. There's an edition from the *Presses*... no, from Vrin, I think, but no matter, one that includes both of them, for those of you who would like to read them both. But I especially emphasize that you might read other things.

So today, I am again speaking with those who will continue to come in mind; if there are some among you who have the slightest mathematical background, read any of Leibniz's works in mathematics. If there are some among you who have a musical background, you will see as we go forward how musical questions are very, very deeply inscribed in Leibniz's system. Fine, so we will see all that.

This course is abstractly or ideally divided in two parts, the first part being addressed to [students in] the first cycle [*undergraduate level*] and the second part to [students in] the second and third cycles [*graduate level*], but the line of separation is ideal, although completely functional and administrative. The separation will be indicated maybe by a recess, [*Laughter*] maybe by a light show. So let's continue.

But I would like to know who arrived here first today. Can you tell me? Was the room open or not? [*Different answers, "we opened it"*]

Claire Parnet: We asked a guy from cleaning to open it, who refused to do so because, he said, the class didn't start until nine AM...

Deleuze: Aha, that's it, that's it.

Parnet: ... and clearly, he had orders not to open it.

Deleuze: And how did you persuade him? [*Laughter*] No, that's fine, that's fine, because let me tell you. In this university, if you haven't yet seen this, there is an entirely strange procedure that has been forced on us following which, when I arrive, I am supposed to go see the guard; I give the guard my little token, and he gives me the room key and keeps the token. Afterward, I have to close the room and bring back the key, and he will return my token to me. So I was worried... It's really grotesque and twisted as a solution. And do you know why? It's because we have to prevent students from taking chairs into the other classrooms. So, I was surprised that the room was open, but I understand. You have to keep doing this every time. [*Laughter*]

[*A student responds*]: And we have to put the room in order as well, because when we get here, the chairs are never like this [*in order*]. The first ones to arrive, Michel and a few others, it's [*inaudible*] . . . and it's been like this for years!

Deleuze: Ah for years? [*Laughter*] That's not right. You ought to go look around ... Ok, let's go.

So, why this subject? I wanted to do "What is philosophy?", and then I wasn't ready, I just couldn't, I just couldn't. "What is philosophy?" is such a sacred subject that I didn't dare to take it on. But this is nearly an introduction to "What is philosophy?". Why? Leibniz's life is rather simple: 1648-1716. I tell you that because this is all I have to say about his life. It's just so you can situate yourself. So he is born nearly halfway through the seventeenth century and dies well into the eighteenth century. For any complementary information on his life, which is nonetheless quite interesting, you can refer to the usual introductions.

What can we say about the tumultuous arrival of Leibniz into philosophy? We can say summarily that it's the entry of German philosophy, that it's the arrival of German philosophy. It's the entry of German philosophy into Europe. [*Pause*] But how does it distinguish itself, this entry of German philosophy into Europe? It distinguishes itself through the arrival of the *system*. It's with Leibniz that the word "system" is going to designate the entirety of philosophy, or the entirety of a philosophy, Leibniz's. Before this, "system" was used in astronomy in the sense of world system; it was used in biology, in natural history, in the sense of the system of nature, but it did not designate philosophy as such. As a result, this will raise an important question: to understand what Leibniz means by "system" and how it identifies with philosophy as such. Fine.

Would the "system" be the Baroque form of philosophy? We are told that such a word can be used only with many kinds of precaution, and that the very word "Baroque" raises more problems than it offers solutions. We are told that one would have to know if it's an aesthetic category or if it's an historical period. We are told that one would have to know what the exact relation is of "Baroque" with "Renaissance", with "Classicism," with "Gothic", etc. We are told that one would have to know what [would be] the location, what era and location, a Spanish Baroque, and central European Baroque. We are told thousands of things that... We are even told [about] the term "Baroque", if it's used rigorously, what is it suited for? Perhaps for architecture, certain aspects of architecture,

in a particular location, in a particular era. But can we speak of a Baroque literature, a Baroque music? We are presented with all kinds of difficulties from the start.

I am saying that these aren't problems for us. I would just ask for us one small thing: to have a vague, or even a confused, idea about what "Baroque" might be called, a very, very simple idea that we might consider as a hypothesis, and then we would look for the consequences of this hypothesis. We would develop the hypothesis, and then we would see if that worked. We would need to have a functional hypothesis, I mean, not defining an essence of the Baroque, but defining something that the Baroque would be *presumed to create, an operation*. I believe we would get out of all these problems that wear us out from the start, that is, what does the word "Baroque" mean? Does it refer to this or to that? Under what conditions might it be legitimately used? If we have an operating hypothesis, what constitutes a Baroque man? And my hypothesis is very simple, but on the condition that this operation coincides neither with an operation that might be called Gothic, nor one that might be called Renaissance, nor one that might be called Classical, nor one that might be called Romantic, etc. On the operating level, we have to look for a certain specificity of the Baroque.

If I am formulating a very general hypothesis, I already have the answer. I am not questioning myself about the location in which the Baroque did this or that – is it in music? Is it in architecture? Is it in literature? -- I am saying something quite simple: *the Baroque creates folds*, the Baroque creates folds. It's a hypothesis. The fold is therefore the essential characteristic of the Baroque understood as an operating action. At least, for those who were here last year, this assures me as being the entirely natural transition from last year. We were speaking frequently about the fold, but from another viewpoint. For this year, we find ourselves faced with the necessity, perhaps, the necessity of confirming, of trying to construct a concept of *the fold* which, as concept, obviously, if all goes well, must follow all the sinuosity of Leibniz's philosophy. In fact, if this philosophy is under the sign of the fold, it is normal that I speak of a sinuous philosophy.

What does all that mean, that the Baroque is what creates folds? I cannot yet know. I am saying [that] the Baroque is located where matter does not cease being pleated, being pleated onto itself, or where the soul does not cease being folded, *the pleats of matter (les replis de la matière)* and *the folds of the soul (les plis de l'âme)*.<sup>2</sup> If I am saying the soul folds into itself, that matter pleats onto itself, sense at least [that] I don't know if this is Baroque, but I know that it's not about anything of interest to a Classic, nor is it about anything of interest to a Romantic. We are going forward by intuition. I don't know; I'd like for this already to say something to you, I mean directly to your heart, the pleats of matter and the folds of the soul, and to say to you, yes indeed, someone who says this or does that, who folds the soul or pleats the body, well yes, that's someone Baroque. I don't at all know why yet, or how. It's not easy to fold one's soul. As a result, today and perhaps the next time again, we will proceed through a simple introduction, on this subject of "Leibniz as Baroque philosopher." Notably, we are going forward with a group an aggregate of guideposts around the themes "pleats of matter" and "the folds of the soul", so that in today's session, we could place it under the sign of paragraph 61 in the *Monadology*, where in this paragraph from the *Monadology*, it ends in a truly splendid

way: "[A soul] could never bring out all at once everything that is folded into it because its folds go on to infinity." <sup>3</sup> That's it! It's not even explained, there's nothing to be explained.

First, try to get a sense of this; it's a very strange statement. Can you imagine there being a similar expression in Descartes, however little you may know Descartes? No, it's unimaginable: the folds of the soul. This expression is beautiful. You have to learn it by heart. Yes, it's gotten lost. "It [the soul] could never bring out all at once everything that is folded into it because its folds go on to infinity." But this [expression] gives us something. *The fold, the Baroque fold goes on to infinity.* [Pause] The fold that goes on to infinity, it's the pleat since it's obvious that it's not the Baroque that invented the fold. For example, in sculpture, there are always folds, if only through the presentation of a garment. A garment creates folds. Yes, certainly, a garment creates folds; every fold is not Baroque. Fine. So much the better. Our hypothesis is fine since we already have the differential characteristic of the Baroque. Yes, every fold is not Baroque, but not every fold goes on to infinity. When the fold goes on to infinity, then it's Baroque.

Oh, but what can that even mean, the fold going on to infinity? So, every fold is pleated; that doesn't prevent us, for convenience's sake – this is indeed what Leibniz says because, on the fold of the soul, he says: since they go on to infinity, that makes them pleated – that doesn't prevent us, for convenience's sake, from speaking particularly of the pleats of matter and the folds of the soul. Are there two levels, and should the Baroque thus be on two levels, one for the pleats of matter and one for the folds of the soul? This is already very important for us for then another question would be posed: what is the relation between the pleats of matter and the folds of the soul, and vice versa? You indeed sense that between the aggregates of folds, can a relation of causality be established? We can certainly establish bi-univocal kinds of correspondence. This will be a system – hey, a system! – a system of kinds of correspondence between the pleats of matter and the folds of the soul.

But finally, all that is rather obscure, but this obscurity is so much more relaxed, easy, than if we approached Leibniz's philosophy abstractly – for it's not an abstract philosophy, no more than any philosophy. As a result, the first aspect [is]... I would like to establish a system of guideposts both in what is usually called the Baroque and in Leibniz's philosophy.

My first [aspect in the] system of guideposts concerns the pleats of matter.<sup>4</sup> I would say that the Baroque is the presentation of a form of matter that does not cease creating folds or being pleated back and being unfolded. Under this first aspect, this means that the Baroque is defined in fact, as a treatment of matter, which means what? Which consists of what? I would say that the treatment of matter is *a treatment in bulk* [*en masse*]. The Baroque treats matter in huge masses, and the notion of mass will be fundamental within Baroque art. One of the best commentators and one of the first commentators on the Baroque is [Heinrich] Wölfflin, in a book that is without doubt, and remains, the best book or one of the best books on the Baroque, *Renaissance and Baroque* [1888]. Wölfflin [*Deleuze spells out the name*] emphasizes this first point, the treatment of matter in bulk

as a characteristic of the Baroque. And as Wölfflin tells us, this is how the Baroque operates within the colossal or the huge, and he says that its fundamental characteristic is *gravitas*, gravity, weight. And we recognize Baroque architecture not in a single characteristic, but among [several] characteristics, within the following characteristic: the increase of architectural dimensions, but in what form? We are going to locate... Let's try to establish some guideposts.

According to Wölfflin, the first characteristic is horizontal enlargement, a kind of enlargement that is located, for example, in the horizontal enlargement of facades in Baroque architecture. And this enlargement is confirmed by the lowering of the pediment – I am saying some very, very elementary things regarding Baroque architecture – the lowering of the pediment, or also the lower arch, henceforth elliptical, like a kind of *gravitas*, [or] the fullness of the wall that no longer allows the sight of articulations and that operates there as a kind of ... that is covered over, with its articulations covered over, implying an enlargement effect, [or] the pillar instead of the column, [with] the same effect, [or] staircases with lowered steps that you find, for example, already in Michelangelo, not only lower steps on staircases, but as regards Michelangelo's famous staircases, [*Deleuze gets up and starts drawing on the board*], I see it like this. Perhaps you sense the birth of the fold, and this swelling, this puffiness, with its lowered steps, this swelling, this puffiness produces a thrusting movement (*mouvement en avant*). [*Deleuze sits down*] Fine. Baroque staircases are the most delightful to climb, you know, the wide and low step. You hardly have the impression of climbing.

Fine. The second characteristic connecting to this is a kind of treatment of matter not simply by enlargement, but – suddenly you sense that this is connected; I have no desire to undertake logical deduction; you sense that these are very natural passages – so henceforth the treatment of matter [is] through softening (*amollissement*). The masses are soft, [hence] the treatment of mass not only in bulk, but in soft masses. In other words, the softness of the form in Michelangelo's staircase is obvious. At the extreme, we would have to speak of a tendency of matter toward the fluid, [*Pause*] a kind of turbulence of matter.

And what does this position of soft masses imply? It implies something that is essential, that will be essential for us today and for the next time: a rounding off of angled forms. As Wölfflin says, repeating it at several points so that it seems to be something fundamental concerning the Baroque, *the right angle is avoided*. For example, the acanthus is a famous leaf. The acanthus leaf is a famous leaf in architecture since it served as decorative motif since the Greeks. But there are two kinds of acanthus, at least, right? There is the *acanthus*, in Latin, *acanthus mollis*, with rounded leaves, and the *acanthus spinosus*, meaning pointed, edged. There is the rounded leaf, *mollis*, and the serrated leaf. The Baroque was not the first to employ this. The Baroque undertakes on its own the substitution of the soft acanthus, *mollis*, for the serrated acanthus leaf that dominated before the Baroque.

What does this mean, this tendency toward softness, toward the fluid, once again, represented by the rounding off of the angle, the avoidance of the right angle? At the

extreme, this is like a conciliation of mass and water. There would be a lot to discuss about this softness of forms. For example, there's Michelangelo who invented a curious procedure, creating architectural models (*ébauches*) not as sculptures, [but] his architectural models in clay. And once again, those who will read Wölfflin's book, which is altogether beautiful, you'll see the extent to which he insists on this tendency in the Baroque of avoiding the right angle, of rounding off the form, that allows precisely for a clay-like model.

And at the extreme, I say that it's a conciliation of mass and water. In fact, the Baroque is not only a kind of architecture, it's an art of gardens, and the art of gardens entails a treatment of water. And Wölfflin himself, at the end of his book, insists on the art of Baroque gardens, with the three forms of treatment of water: the fountain, the waterfall, and the water feature, a lake or a pond. He shows that in all cases, the originality of the Baroque, of the Baroque garden, is that *the water itself must act massively (faire masse)*, and in opposition to what? In opposition to clear streams, clear streams that, in contrast, dominate in all kinds of water structures. But the Baroque structure operates through massive forms of water, even in the fountain: the multiple water jets connect, constituting a mass. In the end, fluid is massive just as mass is fluid. [Pause] And at this level, we see that, henceforth, everything operates in bulk, the solid that is, in fact, a soft solid, the fluid that is, in fact, a massive fluid with turbulence, and that synchronize here again with other masses.

Do you sense the birth of another theme coming to life? It's that among the masses, there can only be harmony, harmony of masses, harmony as resonance of masses. Among the masses, there must be harmonies. And what does that mean? Well, it means that the masses of leaves and the masses of waters respond to one another, entering into counterpoint. And why into counterpoint? They are both audible (*sonores*). There are audible masses in correspondence with visual masses. The audible masses are called uproar (*rumeurs*), and the uproar of leaves must respond to the uproar of waters.

And Wölfflin insists greatly on this, how precisely in Baroque art, the leaves are treated as mass, from which results the rounding off of leaves, and not treated leaf by leaf, [but] as an art of mass, an art of mass that is the Baroque. You understand, simply, if this is an art of mass, in fact, it's an art of the soft, an art of the soft. Why is the mass soft? If that's what creates mass, it's a way of saying that mass cannot be engendered starting from individuals, from ultimate individuals. There are no ultimate individuals. The treatment is necessarily the mass treatment operating through softening, that is, through rounding off of angled forms. How to say what we are sensing here, that the angled form is the hard, that the rounding off of angled forms is the soft?

Good. So let's try to identify... We just created a few guideposts on the level of the Baroque, you see? We move forward just a bit. What does it mean to create folds? [*Sound of Deleuze's chair; he goes to the board*] I can say – let's have a break here -- you see, creating folds is what? Well, it's rounding off angles, creating folds. We are not very far into this, but that's it: to round off angles, but you sense that we have to load many things into this expression. Rounding off angles, hmm, this is whatever you want, but among

other things, it's possible that this is a mathematical operation. It's possible that this could have lots of outcomes. How... Can you round off angles in math? Perhaps you can. Perhaps Leibniz never stopped rounding off angles. He was a great mathematician, so perhaps he was capable of doing that. So, we just say, here we are, the Baroque, you see, how does it create folds? By undertaking a treatment in bulk, and this treatment in bulk undertakes this by rounding off angles, by constituting [forms of] soft matter.

We have to see if Leibniz's philosophy, even before you are familiar with it – I am looking for guideposts – if Leibniz's philosophy is consonant with all that. Oh yes! Matter is treated so much in bulk by Leibniz that it is never separable from a term that Leibniz uses, *the aggregate (l'agrégat)*. Matter proceeds through the aggregate, and the aggregate is the law of matter. The soul will have no less of a law as well, and the whole problem in Leibniz's philosophy will be what the correspondence between these two laws is. I am saying immediately that the soul's law is not the aggregate. It's *the series*, but you sense perhaps that the series is also something very Baroque. Why? For the moment, that's beyond us. Matter is divided into aggregates, and the aggregates are themselves divided into aggregates. An entire uproar of matter... On the level of matter, you will only find aggregates infinitely divisible and infinitely composable. So, I am just saying that aggregates ignore angles. Aggregates are curves. As they go all the way to infinity, a curve that goes to infinity is a fold. Aggregates create folds.

Let's look at the guideposts a bit better with Leibniz. [*The sound of Deleuze paging through a book*] In all of his physics – and Leibniz is also a great physicist – in all of his physics, what does Leibniz create? [He creates] a physics of bodies that he himself calls *elastic*. For Leibniz, elasticity – and he tells us this in print – is the degree of fluidity of a body; [it's] a physics of the elastic body or of the fluid body, elasticity meaning a degree of fluidity of the body. He is opposed to Descartes and to Descartes's physics, no less than to the physics of Atomists, whether it's the Atomists from antiquity or the Atomists from the seventeenth century who conceive of physics above all as being about the *hard body*. For Leibniz, there is no hard body, and he will never stop criticizing Descartes because the entire Cartesian physics is a physics of the hard body to the extent that certain Cartesians drew the obvious conclusion from Cartesian physics, to wit, they returned to Atomism, the atom being the smallest hard body. But for Leibniz, there is no atom. Every mass is composed of mass, all the way to infinity, no more than there is a hard body, each body being elastic, its elasticity being equal to its degree of fluidity. [This is] a physics of the fluid or of the body's elastic force – in Latin, *vis elastica*, Leibniz says.<sup>5</sup>

And why? I would just like it a bit if you knew more, or perhaps some among you already know all this, but an essential point in Leibniz's physics is what? Everyone knows this; we learn that in high school. It's having substituted as the principle of conservation  $mv^2$  [squared] for  $mv$ . Descartes had stated  $mv$ ; Leibniz says  $mv^2$ : it's his famous raising speed to the square. And we ask what this raising speed to the square might mean? It means a lot of things that we will see, that we will try to see much more precisely later, but here I am satisfied with simple guideposts.  $V^2$  refers us to acceleration, and in fact, Leibniz will center his entire study, or will center a large part of

his study on acceleration. And what is acceleration? It's a difference; it's a difference between the movement at a particular moment and the movement in the preceding state, in the preceding moment; or it's between the movement at particular moment and the movement in the subsequent state. It's a difference, or as Leibniz will say more precisely in mathematics, it's *a differential*, a difference that can be, if you like, as small as you wish. To this differential, Leibniz gives a name: it's the *conatus* of movement.<sup>6</sup> All this that I am saying is quite summary. We will see it later; we will see it much more precisely.

As there is a possibility of infinite analysis between two moments, there is an infinite sum of *conatus* [*Pause*] which is like degrees through which the body passes when the speed of its movement increases or when the speed of its movement slows, or when it passes from a state of rest into movement. We will say that movement is like an integral or an integration of elementary solicitations that Leibniz calls *tendencies*, that is, some *conatus*, such that Leibniz pretends to assign a genetic element of movement. The genetic element of movement is the element of a series of increasing or decreasing speeds, the element of a series of increasing or decreasing speeds, whereas Cartesian physics limited itself to the following model: the actual element of a given speed, in consideration of an actual element of a given speed, such as it appears in Descartes, [and] is substituted by Leibniz, the element of a series of increasing or decreasing speeds, a demand (*sommation*) of *conatus*. That is, generally speaking, there is an infinity of degrees through which the mobile passes; there is an infinity of degrees through which the mobile passes when its speed increases or decreases. What is that? You understand? I just wanted to say this: this is the translation of the elasticity of the body in terms of movement. This regime of movement is what the elasticity of the body is. [*Pause*]

Perhaps you are not far from understanding how, in a physics of the elastic body, no rectilinear movement is possible. One must always round off, and round off to infinity. Movement will occur following curves, with variable curvature. But in this, finally, we are getting too far ahead, going too fast, but I have said some things, in fact, just as part of the guidepost of our topic. So, if you don't understand this or that point or theme, it's enough for you to understand one or two [points] since you can already sense that everything is harmonized at one level or another: the status of movement, the status of the elastic body. All of that corresponds; it's a system of correspondences, and perhaps that's what the word "system" means. [*Pause*]

And why... I would just like to insist: henceforth, why... We indeed see that the elastic body is a critique of the atom which is the very image of the hard body. But I say, "elastic body," you can only think of it on a curve, with variable curvature. What does that mean? I am just saying... Well, I see how all of this connects; in fact, it connects quite well. You take an atom as hard body, hard body, indivisible (*insécable*)... [*Interruption of the recording*] [46:38]

## Part 2



... Movement is nothing other than the correlation – this is how it is for Epicurus – nothing other than the correlation of the atom and the void. If there is movement, it's because there are not only just atoms; as Lucretius said very well, there are atoms and there is the void; the correlation of the atom and the void is the movement as rectilinear movement. The atom falls into the void. [*Deleuze goes to the board and draws*] Straight lines, completely straight... Good... But there are atoms that fall into the void. All of that is annoying because they don't meet. The solution from Epicurus, to explain the encounter, is famous, notably: *incerto tempore*... Here I speak Latin on purpose because I can't do otherwise since I don't know what that means. [*Laughter; Deleuze continues drawing*] "At one moment," *tempore, incerto*, what is this? Fine.<sup>7</sup> *Incerto tempore* produces a small deviation, a tiny deviation to which Lucretius gives a famous name, the *clinamen*,<sup>8</sup> a declination, that is, it leaves the straight line. Thanks to the *clinamen*, we understand that the atom encounters the atom and that atomic combinations occur, combinations of hard bodies. So I would say that the combinations [of hard bodies] here move off obliquely. The oblique is still a straight line. The compositions of hard bodies that are created are rectilinear.

All of that, I would like to have you feel... All of that, it's quite superficial (*gros*), but each time, I am trying to create a kind of... to indicate the logical complementarities. If you provide yourself with a hard element, I believe that something obvious emerges ... If you provide yourself with a presumably absolutely hard element, you can only compose mixtures or combinations along a straight line. That is, you would have to engender curves through combinations of straight lines, which is quite possible, but this is a very special kind of mathematics.

So, here we are. The atom taking *incerto tempore*, does it do so? At a given moment, starting in Antiquity, people have made fun of the Epicureans, saying oh yeh, so that's easy to say! At one moment, there is the atom leaving the vertical and taking a deviation with a small angle in relation to the vertical. This small angle, the angle of declination, the angle of the *clinamen* -- that gave Cicero quite a laugh; he said, it's not reasonable, it's childish, all that -- but *incerto*, it's not clear that this means "at any given moment whatsoever", not necessarily, in any case. And in fact, you know... [*Deleuze continues writing on the board*] Let's assume the atom to be the smallest body. This isn't entirely true since for the Epicureans, or for Lucretius, the atom has numerous parts. It does not constitute the minimum, but that doesn't keep it from being indivisible (*insécable*). So, I can say that, to some extent, it doesn't have indivisible parts. It's the smallest indivisible body.

Fine. For Lucretius and for the Epicureans, the idea of the smallest body is obviously an eminent body, which is the *smallest time*, that is, the atom of time. What is this, the atom of time? It's the smallest time thinkable – I have to think in time -- during which the atom is in movement in a given direction. The smallest time... There you are. [*Deleuze indicates his drawing and notes on the board*] You think of the falling atom. Have you got it, in your mind? You think of the falling atom, of its duration, of its drop. Fine. You do the opposite experiment. It's a thought experiment. You try to think (in) the smallest time that you can, think as the time in which the atom falls. Beyond this time, it remains

[unclear word]. You're following me, right? It's quite simple. So, there is an atom of time, the smallest [time] during which the atom is thought of as falling, fine, falling in a straight line. Well then, you understand everything!

*Incerto* means what? *Incerto* means... *Incerto tempore* means *in a time smaller than the minimum of thinkable time*. If there is a minimum of thinkable time in which I must think of the atom's fall, I can think of it at rest. In order to think of the atom's movement, I have to think of it in time, falling in time, its descent occupying a certain time, and there, a minimum beyond which the atom will be necessarily thought of as being at rest. If I say, let's consider a time smaller than the minimum of thinkable time, you will tell me, I can't think that. Fine, I can't think that. I pose it; I don't think it. I pose a time smaller than the minimum thinkable time. [Pause] I am saying the *clinamen*, the deviation, which occurs in this time. The deviation does not come on the vertical at any moment whatsoever; it is already presupposed through the entire rectilinear line. It affects the entire vertical. It launched an oblique, creating an oblique since *incerto tempore* means not in some arbitrary time whatsoever, but in a time smaller than the minimum thinkable time. So, there is a straight line, but it is always already oblique, such that the atom necessarily encounters the atom. [Deleuze may sit back down at this point]

This comes down to asking: what does a physics of hard bodies consist of? It implies a rectilinear construction of components, and it implies oblique straight lines that are defined by the angle – these are angular formations – that are defined by the angle in relation to the vertical. In other words, the formations of hard bodies are rectilinear and angular.

Fine. Understand, this works fine for us, Leibniz's physics, a physics of elastic bodies, and henceforth, of curvatures, and henceforth, of curvatures. We still don't yet understand what that means, but elasticity rounds off the angles. Curvature is the rounding off of angles. The Leibnizian aggregates are masses infinitely composed of masses. Henceforth, they are curves. We can't get away from it: you repeat that to yourself enough for you to understand it. I can do no better, because if you don't understand, it's because you haven't yet repeated it enough in your mind. Soft masses are necessarily curves; elastic masses are necessarily curves. The mobile, here, is on an infinitely variable curve. What is the fold that goes all the way to infinity? It's the curvature with a variable surface. It's the line with variable curvature or the surface with variable curvature. This is what all of Descartes's physics and mathematics could not detect: a physics of elastic bodies was required. But what does that imply? [It implies] special mathematical tools. We will see how these mathematical tools... As if by chance, these are infinite series and differential calculus. Fine. [Pause]

How are you doing? Still holding up? So a little later we are going... Today, this is a short session. [Here's the] final point on this treatment in bulk. Let's consider... You see, we are establishing guideposts. First, [there's] the body in general (*quelconque*), good, with its enlargement and its lowering. And then, [there's] the second guidepost, the elastic or even fluid body. And all that is a way of saying: what does it mean to create

folds? Matter creates folds; it doesn't follow the angles. Understand? Good. That's what Leibniz's philosophy is. [*Pause*]

Let's confirm a third and final guidepost, the living body, the folds of flesh. It's a constant theme. There is a poem; there's a Baroque poet, English, a very great Baroque poet, John Donne (*He spells the name*). He wrote a beautiful poem; I don't dare recite it to you in English, because... He speaks about a pair of lovers, and he says, "You are both fluid," "You are both fluid."<sup>9</sup> [*Donne's poem "The Ecstasy"*] But this is the Baroque conception of mass. Mass is fundamentally fluid, and you no longer have any angles. And in the same poem, he will add, "Your face flows..."<sup>10</sup> The love poem is perpetually penetrated by metaphors of fluid. This is how one creates a Baroque poem, a great Baroque poem.

Good, but I am saying [that] the living body... that in fact, it's the least of things to say that the living body, or flesh, creates folds – folds and pleats of flesh. Fine, but why does it create folds? For two reasons, for two reasons, I believe, and here, we have to return to all sorts of ancient biological doctrines in which Leibniz participated. You have to place yourself with the initial astonishment at the discovery of the microscope, and you have to resituate all this philosophy of life under two expressions, which are not literally in Leibniz's works, but the spirit is there. The first expression is: "All flies are within the first fly"; all flies are within the first fly. I cannot say that this is signed by Leibniz, or that Leibniz said it or repeated it, but it's a commonplace of the philosophy of life at the end of the seventeenth century, one that comes to be confirmed by the discovery of the microscope. What does this mean, "all flies are within the first fly"? It means that the first fly that God created contained all the others, that is, contained *the infinity of flies to come*. It's a lyrical expression to qualify what is called the pre-formation of germs, or the point of view of pre-formation. The primitive egg contains all the eggs to come, but that would mean nothing if we only said the primitive egg contains the organism. In other words, the primitive egg *envelops* the organism, and envelops as well as all the organisms to come of the same species. It's the thesis of pre-formation.<sup>11</sup>

It envelops: what does that mean? It means that there is something in mathematics called a kind of homothety, a homothety from small to large, or rather from large to small, however small it might be.<sup>12</sup> The organism envelops organisms to infinity. Does the first fly contains all the flies to come? Yes, but in a miniscule state, and each fly, in turn, contains an infinity of flies, smaller and smaller flies. If you will, this is the simple vision, the vision that's given when one doesn't do science, the vulgarized vision of the theory of preformation of germs, at the level of the living. The organism contains an infinity of organisms, simply smaller and smaller, and what does that mean? [That means] that the whole concept of life is going to be encompassed starting from movements – here, I come again to operations – starting from the operations of envelopment and development.

Envelopment: I am saying this because to envelop is to create folds; to develop is to unfold, and in Latin, the language spoken so often in that era, this is constant, the pairs *implicare-explicare*, to implicate-to explicate ; *involvere-devolvere*, to envelop-to develop ; *involvere-evolv* [*Deleuze corrects himself*] *Evolvere*... The three couples:

*involver-evolver*, are strictly synonymous.<sup>13</sup> *Impliquer-expliquer*: that which is developed, is explained; that which is enveloped, is implicated, or involves. As a result, when you find in a text from this era the word “evolution,” certainly don’t believe – I don’t even need to tell you this; it would be a kind of limitless stupidity – that you have discovered an ancestor of evolutionism. For in all these texts, the word “evolution” is used strictly in an opposite sense from what evolutionism will give it, since in evolutionism... What is the innovation in evolutionism at the end of the nineteenth century? It’s to tell us [that] evolution occurs through the production of some new thing, that is, through epigenesis. Evolution occurs through the production of a new thing. That’s the evolutionist idea: starting from the egg, the egg undergoes operations that will produce something new, that is, something that is not encompassed in the egg.

But previously, before evolutionism, in what was called the preformation stage, the word “evolution” does indeed exist. The living being evolves. But what does that mean, “evolve”? It means, if you prefer, *to increase* [*augmenter*], just as *involver* means “to diminish”, or if you prefer once again, *evolver* means to unfold [*se déplier*], exactly as the butterfly unfolds.<sup>14</sup> It unfolds, or rather it refolds into the cocoon, but the living being passes through alternation of folding and unfolding. To evolve is to unfold one’s parts. The organism unfolds when it unfolds its own parts and folds itself when it pleats its own parts. Pleating its own parts, it becomes smaller and smaller. Unfolding its own parts, placing them outside one another, it becomes larger and larger. Evolution is a matter of increase, with conservation of similarity, hence the homothety, you see? And involution is the reverse symmetry of evolution; it’s the diminution with conservation of similarity, such that – here I am saying that this is frequent, for example, in Malebranche and in Leibniz, all that – such that... But Leibniz is going to derive from this some very astonishing consequences. I am telling you immediately so that you will sense the extent to which, in the living body, the notion of the folds finds its importance.

So there are rhythms of folds and unfolds that traverse the living being. That is what creates the flesh, the flesh that’s irreducible to infinity, on the contrary, expressible, unfolding its own parts. The organism folds and pleats its own parts, unfolds and again pleats its own parts. It’s very beautiful vision of the living being, since from this, Leibniz derives the idea that – and it is here that he becomes original – he derives a source for vitalism. What is his vitalism? His vitalism consists in saying: the living being is a machine. You will tell me that “the living being is a machine” is not a vitalist proposition; it’s a mechanist proposition, that is, precisely the opposite. Well then, precisely not! For, as Leibniz says, and here he becomes quite brilliant – he is so all the time, always brilliant, but here particularly – he says: Do you know what the mechanistic lacks? What is missing in the mechanistic and the mechanismism is that they [mechanicist proponents] understand nothing about the machine. In fact, what is opposed to the mechanistic is the machinic. It’s a great, great idea. Why? Because something mechanical is indeed a machine, he says; only it’s a machine that refers to final parts that, in themselves, are not a machine. For example, it refers to a piece of steel that has taken a particular form, but this piece of steel is not in itself a machine. In other words, something mechanical is a *finite machine*; it’s a machine whose ultimate parts are not machines, whereas a machine, what is it? It’s a machine that goes on to infinity. It’s a

mechanism that goes on to infinity. It's a machine in which all the parts to infinity are still machines. It's a machine machined to infinity. In other words, vitalism equals machinism, the only way to show that the living being is not something mechanical is to say that the living being is a machine.

Paragraph 64 of the *Monadology*, [Deleuze looks in his edition] this is really a beautiful text: "Every organized body of a living thing is a kind of divine machine or natural automaton." So we say, alright, this is a mechanistic proposition. But we await what comes next: "Because a man-made machine isn't a machine in every one of its parts"; because a man-made machine isn't a machine in every one of its parts, not a mechanism, it's something mechanical; it's not a machine. "For example, a cog on a brass wheel has parts or fragments which to us are no longer anything artificial and bear no signs of their relation to the intended use of the wheel."<sup>15</sup> "But Nature's machines", that is, natural machines or living beings "– living bodies, that is – are machines even in their smallest parts, right down to infinity," an infinitely machined machine. Henceforth, they never cease being folded, so there is a homothety of the parts and the whole. And what is the whole if not the unfolded part? And what is the part if not the whole that is enveloped and pleated?

[This development leads] to the point that Leibniz can ask – and you know, it's not complicated, the story that has frightened pious souls – namely, what happens with death? But with death, it's very simple. I am going to tell you what happens with death.<sup>16</sup> In fact, there is no soul without the body, so the idea that at death, our soul is separated from the body is an entirely stupid question just to simplify things. That's not it; in fact, there is no soul without the body. Simply, at death, our body is enveloped to infinity, such that it becomes livable infinity. And although one might then have oneself cremated, incinerated, that changes nothing, for in the ashes, there will still be a body, however small it might be, something that is my body in the way it is enveloped to infinity. And God's judgment? So, I still maintain a body at death; I maintain a body. Simply this body is infinitely enveloped, infinitely pleated onto itself. It's such a beautiful idea, and what about God's judgment? On the day of God's judgment, there you have all the infinitely pleated bodies since death coming forth, exactly like a butterfly unfolds, leaving its cocoon; the butterfly unfolds. Well when the judgment of God sounds forth, our bodies will again unfold, and we will, in fact, discover the bodies that will have never left us, that simply had become like so many infinitely folded pinpoints. This is beautiful. This is the infinitely machined machine that you can grasp on these two levels: either infinite contractions – the body infinitely folded onto itself – or infinite extension – the body unfolded on itself, the glorious body of the final judgment. Right? That gives you something to ponder!

So, what one must still hold against mechanism is to have understood nothing about machines, and vitalism is the identity of the living being with an infinitely machined machine. So that is the first aspect that, if you will, concerns the organism. There is an infinity of organisms in the organism, that is, an infinity of organisms are folds into each organism. There are flies from flies from flies to infinity. And here we have the other aspect of vitalism – there's another aspect -- which is that, henceforth... But organisms

themselves, where do they come from? They no doubt come from simple living beings since they are aggregates of organisms. They come from simple living beings, but I don't yet know what that means. We will see later about "the Simple" in Leibniz, as this might exist, since everything goes on to infinity. Were there no simple beings... I say randomly, in any event, [that] the simple living beings would exist on another level than the one where we are.

So if that is the case, what will the second aspect of vitalism be? It's that an organism is always created from a portion of matter insofar as it is animated by simple elements. You see? The first aspect of vitalism is an organicism; the second aspect [is] what is the organism made of? [Of] simple elements insofar as they animate a portion of matter, however small it might be. This time, it's no longer the viewpoint of the egg; it's the viewpoint of the *animalcule*, and this is well known in all histories of life, of the notion of life. You will find arguments between schools in the seventeenth century, between a school called Ovism, the egg, the Ovists, and the other calling itself the Animalculists, partisans of animalcules. What counts most, the egg or, in the end, the spermatozoid? It's a problem that will continue everywhere subsequently. These are the two points of view of vitalism.

Leibniz brings both of them together quite well. What is an organism made of, that is, the organic material? What is it made of? Well, on the second level, it is said, organic material is made of simple elements animating a portion, however restrained it might be, of *inorganic* matter. You understand? We have passed from the egg to animalcules. And, this is the path of the microscope. Leibniz's texts on the microscope are fundamental texts for all philosophy. And so, from this comes a new series of entirely brilliant formulae from Leibniz consisting in telling us about this second viewpoint on animalcules, you see, the simple elements that animate a portion of inorganic matter, however small it might be. What does that come down to saying? That comes down to saying that everything is not alive. Of course, everything isn't alive! There is inorganic matter, material masses, that are not living. Everything is not alive, but everywhere there are living beings, and I know very few philosophies of life that are as beautiful, even among modern philosophies, as this idea of the diffusion of living beings in Leibniz. You see, this is something else.

The first aspect of vitalism was increases and decreases, that is, envelopments and developments. The second aspect of vitalism is diffusion, the diffusion of animalcules in all portions, whatever they might be, of inorganic matter. And this is as if he was telling us – there are all sorts of Leibniz's texts suggesting this – it's as if he was telling us, you understand, in a pond, or in a lake – the treatment of waters in the Baroque – in a lake or a pond, everything is not a fish, but there are fish everywhere [in lakes or ponds]. Everything is not a fish in the world, but there are fish everywhere. It's the second aspect of vitalism. This time, it returns to the expression about simple elements diffused in every [kind of] portion of inorganic matter, however small it might be.

And in the correspondence with Arnauld, Leibniz is going to undertake comparisons – here again [are] the rapports of harmony, consonances -- between two cases of matter, the

lake full of fish, on one hand, and on the other, the chaos of marble.<sup>17</sup> His texts are sublimes, very, very beautiful. The chaos of marble appears to be the hardest body. And Leibniz is going to show that [*Deleuze speaks quite loudly here, with emphasis*] *the chaos of marble does not differ in nature* from the pond full of fish; and in the chaos of marble as well, there is an infinity of diffused animalcules. [*Pause*]

So, good... Fine. Everything is not a fish, but there are fish everywhere. The world is a pond full of fish. I would say that this vitalism matters to us because it confirms ... What does it confirm? The treatment in bulk. I am summing up our results: the treatment in bulk as a possible definition of the Baroque operates on all levels by folding and unfolding. [*Pause*] Second concluding proposition: the folds and unfolds go all the way to infinity. This is the difference of the Baroque from all other formations. Third conclusion: if this is so, then bodies are not hard bodies, but elastic bodies and, at the extreme, fluid bodies, and their paths are not rectilinear, but curved, [*Pause*] and their operation consists in perpetually rounding off angles, avoiding the angle, necessarily through a curvature, through a curve with variable curvature.

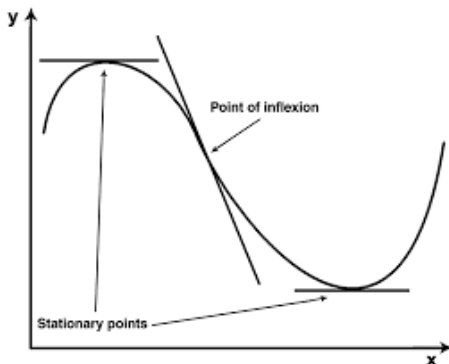
There we are, the first aspect that we focused on: is there a treatment of matter that might be called Baroque? You are going to take a break, but not for very long. And then you can reflect a bit, and you can tell me if there are any difficulties or questions. [*Short pause for a break*] [1:26:48]

So I'd like you to understand well that this is an introduction that has not at all opened up the philosophy of Leibniz. We are creating guideposts, some very general guideposts. All that we've considered during this first part was the treatment of matter according to Leibniz, and asked: is this a treatment that could be called Baroque, and in what sense? No problems? No questions? Good, [*Pause*] so let's continue.

We were dealing earlier with the level of matter, defined as the *level of aggregates*, if you will, the lowest level. Now, we are going to deal with a higher level, and in fact, we are following Wölfflin's path who speaks about what exists above this first level of lowered and softened matter. And this second level that we are considering is now obviously that of form, or formal cause, or if you prefer, the genetic element of form. And just as earlier there was a status of matter, now we must expect there to be a certain status of the soul. Just as matter never ceased folding and unfolding, well, there are folds and pleats in the soul. As we saw in the *Monadology*, paragraph 61: there are folds and pleats in the soul. Everything suggests to us that perhaps, for Leibniz, these folds and pleats in the soul are like *ideal elements of form*. But here we will require lots of guideposts and explanations in order to understand what that might mean, ideal elements of form, genetic elements of forms. The souls would contain the genetic elements of forms, but it would contain the genetic elements of forms insofar as it creates folds and pleats, or at least insofar as there are folds and pleats within it. You sense that here as well, Leibniz is returning to find that Descartes's conception of the souls is rather like a ridiculous summary. [*Pause*]

Good, so what are these, the ideal elements? Folds would be ideal and genetic elements that would account for forms. And in other words, the genetic element of the fold is

what? I am saying that the genetic element of the fold, is the *point that describes the curve*, the point on a curve, the point on a curve with variable curvature. It's the [unclear words] [Deleuze returns to the board]. A curve with variable curvature, I am offering a kind of drawing in a very general form. [Pause; he draws on the board] There. You recognize the curve with variable curvature. The simplest case is the curve with invariable curvature, I would say. [Pause as he sits down again] We can stop there because you have understood everything; I mean that all of our work this year solely concerns – over a long stretch of time – commenting on this figure. [See also the top figure in the drawing at the top of this session]



What is this figure, the curve with variable curvature, or the curve with constant curvature? I would say that is *an inflection*, it's an inflection.<sup>18</sup> What is an inflection? An inflection – I am generally using language from mathematics – the inflection of a line is a *singularity*, that is – oh, it's not complicated – a singularity is something that happens to a line; it's *an event*, something that happens to a line, the curvature. We will call it *point of inflection*; it's a singular point. Every singular point is not an inflection, but the point of inflection is a singular point, the singular point of this inflection. [A very brief gap in the recording is audible here with no apparent loss of material] In general, singularities are not independent from an axis of coordinates, but the inflection is independent of any axis of coordinates. It does not assume any coordinates.

That's what I want to ask: Can we say that there is a genetic irreducibility of the inflection? That is, we have to grasp the inflection as an element of an ideal genesis, as genetic element, that is, as the genetic element that endangers forms. There you are. It seems to me... I cannot say that... It seems to me that this is how it is in Leibniz. The element that engenders forms, the genetic element of forms, is not the rectilinear straight line. It's the curve with constant variation, the curve with variable curvature, or inflection. [It's the] irreducibility of the inflection; you still sense this first session's obsessive theme, always rounding off angles. [Pause]

So, if it's that, I would then say, henceforth, from the point of view of form... From the point of view of matter, [in] the Baroque, we proposed the following idea: the Baroque is what treats matter in bulk, that is, through folds and pleats going on to infinity. Now, I would say that the Baroque is what treats form through the genetic element of inflection. [Pause] For the moment, I cannot say more on this, except that we already have to reflect. We have to stop each time, you know, we have to stop and then look for help.



Reaching out for help, when one speaks or when one writes, there are several things. When one speaks, you need to seek help, [from] you [students], but up to now, silence alone has answered me back. I can say, help me! Yes! Inflection might be, in the conditional, this might be the genetic element of forms.

Good. We just saw that this is very special, inflection, but what does that mean? I am calling on you for help! And suddenly, by calling on you for help, something crossed through my memory, drawings, some drawings of a famous painter. That's what flashed in my memory, yes, it's in Paul Klee. Ah, I tell myself, yes, but [with] Paul Klee, I am going to get criticized: you give the term Baroque to anything at all, like that! Well obviously, not at all! I'm not the one doing it, fortunately; it's Paul Klee. Paul Klee was enormously interested in the Baroque. He wrote about the Baroque. So, if he wrote on the Baroque and found merit in the Baroque, perhaps his own drawings... And in a small, marvelous book by Paul Klee, *Theory of Modern Art*, there is [Pause], there is a study of forms in movement. But the forms in movement assume an engendering of forms starting from a movement. And what does he tell us? That is, [there's] a genesis of forms about which Klee speaks to us under the title "Pedagogical Outlines," and his pedagogical outlines begin with the affirmation that "the point needs nothing other than its own spontaneity." This you must retain since we will find it again in Leibniz; you will see in what sense this is mathematically, physically... all of that. It's a *key* idea [*clé = key, homonym to Klee*] – hey, funny! [Laughter] – It's a fundamental idea for Leibniz. The point needs only its spontaneity. The point's spontaneity, what could that mean? Well, the point's spontaneity is inflection. The point only needs its own spontaneity to follow a curve of inflection.

If I insist on this regarding Klee, it's because you will see that there is an anti-Klee who is no less a great painter, notably Kandinsky, and that everything... And that this has an impact on their paintings – these aren't just theoretical stories from left field -- this is inscribed in their painting. For Kandinsky, on the contrary, the point can enter into movement only under external constraint, and as a result. Kandinsky conceived of all his painting as dealing *with tension*, the tension exerted on the point to make it move. And the whole conception of painting for Klee – if there ever was a painter that one could call spontaneous, on the condition of noting that spontaneous obviously does not being creating just anything – the point follows the curve of inflection through its own spontaneity.

The point is therefore the genetic element by itself of what Klee calls, the "active line," and the active line is this:<sup>19</sup> the drawing on top, that is, an inflection. You see? Don't look at anything but the top one! The active line. [Laughter; *Deleuze's book circulates among the students*] What's better than this?!

The second figure... Henceforth we will follow... You understand, this is what a relay system is. So I was getting bogged down with my story: can the inflexion be the genetic element of form? Wouldn't that be how things are in Leibniz? Since you cannot have me speak directly to Leibniz, since we don't yet have those means... Since I'm speaking

outside Leibniz, so, I didn't quite know how to proceed. And on this, it's Klee that gives us the answer. Perfect! Very good! We have only to follow him.

The second figure [*Deleuze continues showing the book's illustration*]... It's a bit far away. I could make a drawing on the board, but I've had enough of that. You see, the second figure, the one underneath the first, is all interconnected with another much more capricious line. Fine... It's when folds... the fold of inflection gets cut across by a line that seems to be a random line, an uncertain (*aléatoire*) line. But it is precisely possible that the line of inflection offers us a kind of law of the uncertain line.

The third figure – it's odd that he doesn't provide details in the captions very well... Oh, wait, yes he does, the details are fine, so I withdraw what I just said – the third, you see, is very interesting because what has he done? What has Paul Klee done? He doesn't say it, but it is really interesting. [*Pause*] What he has done is to mark the shadows along the side of the inflection's concavity. Henceforth, the cross-hatching changes around the inflection point. Eh? [*Pause; one hears the chalk marks as Deleuze draws on the board*] So what does that create that is innovative? [*Deleuze sits down*] It's that each time, along the concavity, necessarily on the side of the concavity, a center of curvature is defined, a center of curvature, that is going to vary according to the portion of inflection that you're considering on one side or on the other of the inflection point. And again here, I note the case of inflection with constant curvature. If I consider the case of inflection with constant curvature, the center of curvature will vary such that the center of curvature will be on one side as on the other of the inflection point, what we can call an *enveloppe* (*une enveloppante*), a region corresponding to the curvature, [*Deleuze again draws on the board*] according to the convergent straight lines. I sense that this is getting complicated, but finally... Notice [that] the center of curvature is going to change directions -- it's quite simple – and necessarily will not be a point but will be defined by an envelope. Fine.

We will leave it there for the moment, for Klee's drawings, and I complicate things by saying how about Kandinsky? Kandinsky is entirely different. Why? Since for him, the point is normally at rest, there is no spontaneity of the point. Henceforth, the point only moves when a force is exerted on it, pulling it from rest. Henceforth, the line that the point travels along under an external effort will obviously be a straight line. This will be a straight line, and thus, in Kandinsky's text, *Point and Line to Plane*, he passes from the point to the straight line under the influence of a force or tension, and tells us: There are three kinds of straight lines, other straight lines only being variants. The simplest straight line is the horizontal line. Opposite this line we find at a right angle the vertical line. The third line is the diagonal, schematically seen at an angle identical to the two other preceding lines, thus having the same inclination of both, that is, as a bisector.

Fine. What am I going to say? If I now say – will this be clear? -- if I say that [for] Kandinsky, this is a painting of the hard body, and what is so brilliant in Kandinsky? What was Kandinsky able to trace as no other person could trace, by introducing tension here? Anyone who has seen three paintings by Kandinsky would answer that it's the angles, it's the angles. This is a painting of the hard body in which movement is angled

and in which bodies are composed through rectilinear lines. It's the most angles in composition ever accomplished in painting.

If we try schematically to describe Klee, we would say [that] it's a painting of the elastic body. Here, these elastic bodies in Klee, you would find some so admirable. It's a painting of the elastic body in which the point travels spontaneously; it's a painting of spontaneity, only it's not Klee's own spontaneity, but the spontaneity of the point on the canvas, where the point's spontaneity is defined through the inflection that the point pursues. Henceforth, it's a painting that does not cease taking the edges off angles, rounding off the angle, inflecting the angle. [*Pause*]

Someone who worked here [*at Vincennes-St. Denis*], in fact, at some point several years ago, named Bernard Cache, and who is interested in the Baroque, recently published a study, or is currently preparing a very interesting study – because he has a background as an architect – a very interesting study precisely on the problem of inflections in architecture.<sup>20</sup> And his departure point is a bit like Klee's, so we come back to it: the variations of the inflection. So forget Klee now. We used him to confirm this kind of suspicion we had: can the inflection be treated as the genetic element of forms, and under what conditions, specifically the inflection considered as the point's spontaneity?

And all that is literally Leibnizian, that there would be a spontaneity of the point, that the point needs nothing other to enter into movement – all of these are constant themes in Leibniz's physics, mathematics, and metaphysics, such that it's entirely precise for me to say, yes, there is something Leibnizian in Klee. But then, these variations – I am speaking of an inflection – I can submit them to operations of symmetry, [*Deleuze returns to the board*] in which I would no longer have an inflection point, but a turning point (*point de rebroussement*) to produce this. [*He indicates his drawing*] Another symmetry can give me an ogive, or pointed arch. The first figure, [it's] inflection; the second figure, [it's] through returning (*rebroussement*);<sup>21</sup> the third figure, no matter, by another symmetry, [it's] an ogive. I can... These are figures that you can locate; you will locate them already in the Gothic [style]. If I multiply the ogive line, I would have a figure of liquid flowing. [*Pause; Deleuze continues drawing*] No longer through symmetry, a fourth figure... (one-two-three, yes)... but by prolonging the curvature, [*Pause*] and here's what you have! This is becoming prettier and prettier! So, by prolonging the curvature... Why am I insisting on this? This is what a truly Baroque figure is. You see? Very often in Baroque architecture, in the decorative motifs... [*Pause; he continues drawing*] ... the same things on this side... [*Laughter*] Do you recognize it? Thanks to simple decorative motifs, you say, hey, it's a Baroque church! [*Laughter*] The enlargement, there it is. I have summed up today's meeting: enlargement, the motif of inflection that opens you to the ideal genesis. Fine. On the other side, it's the same... There you have a very beautiful decorative motif. [*He continues drawing*] You can also have a kind of starfish there – it's possible – no longer through prolonging, but by rotation around an inflection point. [*Deleuze returns to his seat*] You can have a wave, a fluctuation through continuation to infinity. Eh?

So, we are advancing a little bit into the idea of the genetic element of forms, the genetics of forms. But why? I would say, look at how the inflection does not stop. It is itself a fold. That's what is curious, the spontaneity of the straight line... [*He corrects himself*] the spontaneity of the point (not the straight line). The straight line is what? It's when the point... it's when the point... exactly, the straight line responds to the case in which the point undergoes an external causality. So yes, as Leibniz says, in a very beautiful text, if the point undergoing the external causality, if it is considered abstractly, if the point is considered abstractly, then what does it follow? It does not follow the curve; it follows the tangent to the curve, that is, a straight line. But if it is considered in its spontaneity, then it is presumed to travel along an inflection, and through this, it engenders forms or the form. As an inflection with variable curvature, it is probable that it engenders forms.

But what does spontaneity of the point mean? I can give you the answer in advance, because Leibniz's answer in advance is that the point's spontaneity is what? *It's the point as point of view*. But here, we are not yet ready to understand. It's when the point is determined as point of view that the point's spontaneity appears, and so the view is an inflection. This is just to tell you... It's not so you will understand, but that you will feel this.

So there we are. I would like to end today -- because this is enough -- on a final, difficult point. We have passed from one level of matter and treatment of matter in bulk to another level, the treatment or the genesis of forms. And why? Why did we have to join them? I would say, provided that I can justify this the next time, that just as the first level is constituted by aggregates going to infinity, so too the second level, the level of inflections, is constituted by series going to infinity. And the question remains: why must we go beyond the first level? That is, why isn't it enough to speak of folds of matter, of pleats of matter? Why do we have to go all the way to pleats of the soul that can be considered as the genetic element of forms?

There is a very important text by Leibniz, and rather difficult. [*Deleuze consults his book*] I would just like to read to you so that you might consider this. I am reading very slowly because our goal the next time will certainly be to comment on this text in detail. It's a text on physics, in a letter that is an answer to [Pierre] Bayle, who was an 18th century author, very anti-Leibnizian and who criticized him a lot. There is a letter from Leibniz to Bayle where this is written:

"Any point at all you take in the world," that is, movement from any point at all, "moves along a predetermined line which that point has adopted once and for all, and which nothing can make it abandon."<sup>22</sup> This is a bit mysterious. Let's hold on to: "any point at all," "[a movement that occurs] along a predetermined line which that point has adopted once and for all," understanding that this point [is] adopted once and for all as long as there is nothing else that makes it change. "It is true that this line would be straight..." -- there are a lot of people who say, well, if you only have a point on a line, it's necessarily a straight line that travels along the point. This is even an expression about inertia. Leibniz tells us entirely the same thing. "In fact, if the point were all alone in the world its line would be straight"; if this point could be alone in the world, the line would be

straight, that is, what does that mean? It would be straight, straight being defined as a tangent to the possible curve, to the virtual curve, passing through the point. You sense that Leibniz wants to tell us: in fact, the point follows a curved line; in fact, the point follows a curved line. And it ought to follow a curved line if it were alone in the world. Notice that “alone in the world” certainly does not mean “spontaneous”; it means “abstract.” If the point is treated as an abstraction, then yes, it follows the straight line, notably, it follows a line that is always a tangent, so it follows a straight line.

But it's not alone in the world. Henceforth, it does not follow a straight line, and we can say that no point follows a straight line. Why? He tells us in the text: “Because there is the collaboration of all other bodies”; because there is the collaboration of all bodies, that is, there is an intersection of bodies. “Also it is by just that collaboration that the line is pre-established”, and the preestablished line through the collaboration of bodies is obviously a curve, and a curve with variable curvature since, following the neighboring bodies, it changes according to the movement and displacement of the point. [*Pause*] So the line is not straight by virtue of the mechanical laws since the movement occurs due to the movement of all the bodies. And it's by this very collaboration that the line is pre-established and determined. And he says abruptly, brutally – this comes back to saying, ok, in the end, by virtue of the collaboration of all the bodies one upon the other, with one another, the point follows a curve; it follows a curve with variable inflection according to the kind of neighboring [bodies].

It's time. I sense that you are already tired, but it's very important that you understand. Finally, so it's like this, and then... [*Pause*] The question is why does Leibniz add [this] – there is no gap in the text – he just said that it's the collaboration of all the bodies that determines, that pre-establishes the point as line of curvature, as curved line. So he continues abruptly, "So I claim that there is no real spontaneity in a mass." In fact, spontaneity is not properly in mass, you see what that means: the mass is the composite of the body considered with the other bodies under the regime of the collaboration of bodies. In this, one can say that there is a determination of a body by others; [thus] there is no spontaneity. Spontaneity can not be in the mass since the mass is an agglomerate of agglomerates, an aggregate of aggregates. So this is a regime of external determination. Thus, "So I claim that there is no real spontaneity in a mass," unless it grasped the entire universe, that is, unless it grasped the aggregate of all aggregates. For, if this point could begin by existing alone, if it were extracted from the mass, it would continue not at all in the pre-established line, in the curve, but in the straight tangent. This is clear. And on this point, he is going to become the most mysterious.

Here we have precisely, it seems to me, what this indeed difficult text tells us for the moment: [first proposition] if the point were abstract and all alone, it would follow a straight line. Let's say [that] Kandinsky places himself into the hypothesis of the abstract point; he would follow a straight line. It would be a tangent with virtual curvatures. Second proposition: in fact, the concrete point follows a curve with variable curvature, and these are concrete movements. Why? Because the line that it follows is pre-established through the variable collaboration of other bodies. Third proposition: the collaboration of bodies with a body defines a mass, and this is not yet spontaneity. The

concrete point must have a spontaneity that explains in the final instance that it follows a curve with variable curvature. And this spontaneity, it's not the mass that can account for it. Moreover, bodies would not collaborate with each other; there would not be -- on the contrary, the mass demands, assumes this spontaneity -- bodies would not collaborate with each other if there were not a spontaneity of the point that follows the curve with variable curvature. So, instead of the collaboration of bodies explaining the spontaneity of the inflection, the collaboration of bodies presupposes the spontaneity of the inflection. In other words, and this is all that I want to try to have us sense from this text, the treatment of matter refers to a genesis of forms and assumes a genesis of forms.

And how is it going to express the spontaneity of the point that is located neither in the point all alone, nor in the mass? The spontaneity of the point, here is what [Leibniz] tells us about it: "So strictly speaking [it's] in the substantial form," the form, eh? "So strictly speaking [it's] in the substantial form", in parentheses, "of which this point is the point of view" -- "that spontaneity is located". We have something like three stages: the point all alone that would follow a straight line; the collaboration of other bodies, that is, the mass that predetermines a curved line; and the mass itself, [that] would remain incomprehensible if it did not refer to a superior spontaneity. This superior spontaneity is when the point is neither all alone, nor caught in a mass, but when it has become point of view. For the moment, this is unintelligible.

So let's take another step forward. If the spontaneity of the point is the point determined as point of view, what are the centers of curvature, of inflection? They're the ones that trace an envelope, in its variation, and that jump from one side to the other, back and forth at a point of inflection, but that the center of curvature on the side of the concavity is precisely a point of view. It's the point as point of view; it's the point as point of view, and it's at the level of the point as point of view that the whole bundle of straight lines are going to meet, the convergent straight lines from the curvature all the way to the center of curvature.

In other words, all that I wanted for you to feel is that the idea that there was a matter susceptible to folds and pleats was insufficient. This was a level that we necessarily had to go beyond toward another, deeper level, or rather, a higher level. It was not sufficient. In other words, matter does not account for folds and pleats that affect it. Here we are, I am again becoming clear, becoming limpid. Matter does not account for folds and pleats that affect it; that is, the collaboration of bodies accomplishes the curvature, but does not account for it. The curvature has to refer to a free spontaneity. This free spontaneity will be determined as the spontaneity of the point as point of view. But for the moment, we don't even understand that. We can just say that this spontaneity is directly expressed in the inflection and the series that emerge from it. In other words, [it's] that these are the folds of the soul [that] cite the inflection as free spontaneity -- I assimilate it precisely into the folds of the souls or into the genetic element of the fold -- I can say that it's the folds of the soul that alone account for the ideal genesis of forms, and that the folds and pleats of matter presuppose this second region of folding (*plissement*) of folds and pleats. Sense that we are moving toward a kind of absolute transformation of the notions of subject and object.

Good. This is, however, confusing. Have you understood somewhat, or not at all, because I have to grasp if I have to start over with this the next time? But if you say nothing to me, I won't know if you have understood or not... It doesn't matter to me, but I would like to know if... I mean, I have the impression that all that at the end was not very comprehensible, but... [A student answers] It's just that I am in a bad situation; I am indeed forced to assume certain things about Leibniz, so I cannot manage it. I'm caught in [a bit of a bind]... [End of the recording and the session] [2:14:17]

## Notes

---

<sup>1</sup> Deleuze planned the organization of this seminar in two segments: under the title "Leibniz as Baroque Philosopher," he presents the initial operating concepts on Leibniz, and due to diverse events during the fall, this segment consists of four sessions (28 October, 4 November, 18 November, 16 December) and lasts into the start of the new year with the opening session of 1987 (6 January). For the second segment, Deleuze chose the global title "Principles and Freedom", and this segment consists of fifteen sessions lasting to the final one on 2 June.

Among the introductory comments below, Deleuze indicates that he would have liked to devote this seminar to the theme "What is philosophy?", but that he "[didn't] dare take it on" since "it's such a sacred subject". However, he indicates immediately that the seminar that he is undertaking on Leibniz and the Baroque "is nearly an introduction to 'What is philosophy?'" and all that follows in this annual seminar will have this dual reading, all the more significant in that, unknown to those listening to Deleuze (and perhaps to Deleuze himself), this will be the final seminar of his teaching career, his decision announced at the 19 May 1987.

The transcriptions and corresponding translations were made possible through access to transcripts initially available from Web Deleuze (created by Richard Pinhas) and through access to the recordings available from the Bibliothèque Nationale de France (BNF), faithfully produced over a decade by one participant in Deleuze's seminars, Hidenobu Suzuki. According to François Dosse in *Gilles Deleuze, Félix Guattari: Intersecting Lives* (Columbia University Press, 2011), Suzuki "becomes an institution all to himself", to whom Deleuze would refer colleagues if they weren't able to attend one of the sessions.

<sup>2</sup> These expressions are the titles, respectively, of chapters 1 and 2 of *Le Pli* (Editions de Minuit, 1988); *The Fold* (University of Minnesota Press, 1993).

<sup>3</sup> Cf. paragraph 61, <https://www.earlymoderntexts.com/assets/pdfs/leibniz1714b.pdf> (accessed 27 February 2024)

<sup>4</sup> This corresponds to chapter 1 of *The Fold*, pp. 3-8; *Le Pli*, 4-7.

<sup>5</sup> Cf. Deleuze's use of this term in *Francis Bacon. The Logic of Sensation* (University of Minnesota Press 2003), p. 36.

<sup>6</sup> Deleuze uses this term in this way in "Lucretius and the Simulacrum" in *Logic of Sense* (Columbia University Press, 1990), p. 269.

<sup>7</sup> The Latin expression to which Deleuze refers here is *paulum, incerto tempore, intervallo minimo*, that he translates as "in a time smaller than the minimum of continuous, thinkable time," in "Lucretius and the Simulacrum," in *Logic of Sense*, pp. 269-70.

<sup>8</sup> See the reference in "Lucretius and the Simulacrum" for this term and the subsequent development here.

<sup>9</sup> John Donne, "The Ecstasy".

<sup>10</sup> In fact, it's the "soul" rather than the "face": "That able soul, which hence doth flow", and "So soul into soul may flow".

<sup>11</sup> On pre-formation and the following development here, cf. chapter 1 in *The Fold*, pp. 8-10; *Le Pli*, pp. 13-16.

<sup>12</sup> On homothety, cf. *The Fold*, pp. 16-17; *Le Pli*, p. 23.

<sup>13</sup> In fact, it is not entirely clear from what Deleuze says here what the third pair is, i.e. the opposite of *evolvere*.

<sup>14</sup> These precise etymologies would need additional verification.

---

<sup>15</sup> Cf. *The Fold*, p. 143, note 17, for an alternate translation.

<sup>16</sup> Deleuze refers to this point briefly in *The Fold*, p. 10; *Le Pli*, p. 16.

<sup>17</sup> Cf. this comparison in *The Fold*, p. 9; *Le Pli*, p. 14.

<sup>18</sup> On curvatures and inflections, cf. the start of chapter 2 in *The Fold*, p. 15; *Le Pli*, p. 21.

<sup>19</sup> The three drawings taken from “Pedagogical Outlines” are located in *The Fold*, p. 15; *Le Pli*, p. 21.

<sup>20</sup> On transformations according to Bernard Cache, see *The Fold*, pp. 15-17; *Le Pli*, pp. 21-23.

<sup>21</sup> Cf. *The Fold*, p. 16; *Le Pli*, p. 22.

<sup>22</sup> Cf. p. 29, [https://www.earlymoderntexts.com/assets/pdfs/leibniz1697a\\_1.pdf](https://www.earlymoderntexts.com/assets/pdfs/leibniz1697a_1.pdf) (accessed 1 March 2024).