

**Gilles Deleuze**

**Seminar on Spinoza: The Velocities of Thought**

**Lecture 11, 17 February 1981**

**Transcription (for Paris 8): Part 1, Marielle Burkhalter, Part 2, Vanessa Soubiran; Part 3, Charles J. Stivale; augmented transcription by Charles J. Stivale**

**Translation (for Web Deleuze), Timothy S. Murphy; augmented translation by Charles J. Stivale**

### **Part 1**

Those of you who won't hear anything, you might as well leave because there's no point, as I'm quite ill, I have very little to say, so there it is. So, listen...

The last time, in an effort to [*Pause*] analyze the different dimensions of individuality, I had tried to develop this theme precisely of the presence of the infinite in the philosophy of the 17th century, and the form under which this infinite presented itself. And this theme is very fuzzy (*flou*), if you will, and it seems to me that this truly is valuable for the nature of this 17th century thought, and I would like to draw from it some themes, some relatively fuzzy themes, still concerning this conception of the individual. This is almost an attempt to add concrete comments so that you might feel this kind of infinitist conception of the individual. But, I am saying, particularly in Spinoza's case, but here perhaps precisely, what interests me today, is that Spinoza provides a perfect expression, as if he pushed those themes that were scattered among other authors of the 17th century as far as they could go.

I am saying, in all its dimensions, the individual as Spinoza presents it, I would like to say three things about it. On the one hand, it is relation, on the other hand, it is power of action (*puissance*), and finally it is mode, but a very particular mode, a mode that one could call intrinsic mode, intrinsic mode.<sup>1</sup> And at least at the start today, that's what I would like to explain, these three themes. The individual -- to establish terms in Latin, these terms return frequently in the philosophies of the Middle Ages and Renaissance -- I would say that the individual insofar as being relation refers us to a whole plane that can be designated by the name composition (*compositio*), composition, as if, henceforth, all individuals being relations, there was a composition of individuals among themselves, and individuation is inseparable from this movement of composition.

Second point, [the individual] is power of action, that is (*potentia*). This is the second great concept of individuality, no longer *compositio* that refers to relations, but *potentia*. The third, being *potentia*, it is something quite special that will receive the name -- in fact among certain philosophers of the Middle Ages -- that will receive the name, intrinsic mode, *modus intrinsecus*. *Modus intrinsecus* is found quite often in the Middle Ages, in certain traditions, under the name *gradus*. This is degree, the intrinsic mode or degree.<sup>2</sup> So, it's to each of these three domains --

relation and composition of relations, power of action, degree or intrinsic mode – that I would like to try to define a bit as concretely as possible.

I am first saying, you indeed see that there is something common to these three themes: it's through them and according to these three terms at once that the individual is not substance. If it's a relation, it's not substance because substance concerns an end (*terme*) and not a relation. As they said in the Middle Ages, -- here, Latin is very useful -- substance is *terminus*, it is an end (*term*). If it's power of action (*puissance*), it's not substance either because, fundamentally, whatever is substance is form. It's the form that is called substantial. And in the end, if it is degree, it's not substance either. Why? It's because, no doubt, every degree refers to a quality that it regulates (*grader*); every degree is degree of a quality. And, what determines a substance is a quality, but the degree of a quality is not substance.

You see that all this revolves around the same intuition of the individual as not being substance. I begin with the first characteristic: the individual is relation. This is perhaps one of the first times in the history of philosophy that an attempt is being sketched to think of the relation in the pure state. But what does that mean, thinking of the relation in the pure state? Is it possible, in some way, to think of the relation independently of its terms? The relation in its pure state would be independent of its terms. What does a relation independent of its terms mean? There had already been a rather strong attempt at this by Nicholas of Cusa.<sup>3</sup> In many of his texts that I find very beautiful, he had an idea that will often be taken up again later. It seems to me that in his work, [this idea] appeared in a fundamental way, that is, every relation is measure, only that every measure, every relation, plunges into the infinite. He demonstrates this regarding analyses; the Cardinal of Cusa dealt often with issues concerning weighing, the measure of weight. He has some very strange pages on weighing, on the measure of weights, insofar as the relative measure of two weights refers to an absolute measure, and the absolute measure itself always brings the infinite into play. This is very bizarre, this theme, if you will; there is an immanence of pure relation and the infinite. By pure relation, one understands the relation separate from its terms. Thus, it's for this reason that it's so difficult to think of the relation independently of its terms. It's not because it's impossible, but because it puts into play a mutual immanence of the infinite and relation.

So, fine, what does that mean? It's as if, at that point, we could define intelligence, the intellect, as the faculty of setting out relations. But, precisely in activity called intellectual, there is a kind of infinite that is implicated (*impliqué*). It's at the level of relation that the implication of the infinite occurs through intellectual activity. What does that mean? Doubtless it will be necessary to wait until the 17th century to find a first status – I am not saying that we will limit ourselves to that – a first status of the relation independent of its terms. For this is what many philosophers had sought since the Renaissance, including those who made use of mathematical means. This will be brought to a first perfection in the 17th century thanks precisely to infinitesimal calculus.

This is where I'd like to say some very simple things that absolutely do not require that you be familiar with mathematics; that is, that even if you have no such familiarity, you should be able to understand this: infinitesimal calculus puts into play a certain type of relation. My question is: which kind of relation emerges with infinitesimal calculus, and which, no doubt, was foreseen by so-called methods of exhaustion that were like a prefiguration of infinitesimal calculus? The

relation to which infinitesimal calculus gave a solid status, or in any case apparently solid, is what is called a differential relation, and a differential relation is of the type  $dy/dx = \dots$  -- we'll see what it's equal to --  $dy/dx = \dots$ . Fine, how does one define this relation  $dy/dx = ?$  Once again, I am not calling on you for anything, no familiarity with math, so that everyone might understand.

That which is called  $dy$  is an infinitely minute quantity or, as this will be called, a disappearing (*évanouissante*) quantity, a quantity smaller than any given or givable quantity. Whatever the quantity the you are given for  $dy$ , whatever the quantity of  $y$  you are given, that is, whatever the value considered is for  $y$ ,  $dy$  will be smaller than this value, however far you go. So, I can say that  $dy$ , insofar as a vanishing quantity, is strictly equal to zero in relation to  $y$ . In the same way,  $dx$  is strictly equal to zero in relation to  $x$ . In fact,  $dx$  is the vanishing quantity of  $x$ ,  $dx$  is the vanishing quantity of  $x$ . Thus, I can write, and mathematicians do write,  $dy/dx = 0/0$ . This is the differential relation. Are you following me? If I called  $y$  a quantity of the abscissa and  $x$  a quantity of the ordinate, I would say that  $dy = 0$  in relation to the abscissa,  $dx = 0$  in relation to the ordinate.

There we have the question. On this matter, you understand this, so good, fine; it's not difficult,  $dy/dx = 0/0$ , ok? Is this equal to zero? Obviously not.  $dy$  is nothing in relation to  $y$ ,  $dx$  is nothing in relation to  $x$ , but  $dy$  over  $dx$  does not cancel itself out. The relation subsists, and the differential relation will present itself as the subsistence of the relation when the terms vanish. They have found -- now here, this is very, very important -- they have found the mathematical tool, and even when they use it solely as a tool, as a convention, they have found the mathematical convention, the mathematical convention that allows them to treat relations independently of their terms. And what is this mathematical convention? -- I am summarizing -- It's the infinitely minute. Here is how I am able to say: the pure relation thus necessarily implies the infinite under the form of the infinitely minute since the pure relation will be the differential relation between infinitely minute quantities. It's at the level of the differential relation that the reciprocal immanence of the infinite and relation is expressed in the pure state. If you understand that, you have nearly understood everything. I am saying,  $dy/dx = 0/0$ , but  $0/0$  is not 0. In fact, what subsists when  $y$  and  $x$  cancel each other out under the form  $dy$  and  $dx$ , what subsists is the relation  $dy/dx$  itself, which is not nothing.

And what does this relation  $dy/dx$  designate? To what is it equal? To proceed very simply -- and that's precisely what I've been hoping for -- let's say that  $dy/dx$  equals  $z$ , that is, it does not involve  $y$  or  $x$  at all, since it's  $y$  and  $x$  under the form of vanishing quantities, fine, not involving  $y$  and  $x$  at all, but designating  $z$ . What do I mean by this? Here's a very simple example: when you have a relation  $dy/dx$  derived from a circle, this relation  $dy/dx = 0/0$  doesn't involve the circle at all but refers to what is called a trigonometric tangent. Fine, here, this matters little, but you don't need to understand anything at all here. You can just understand that  $dy/dx = z$ , that is, the relation that is independent of its terms will designate a third term and will serve in the measurement and in the determination of a third term, the trigonometric tangent. In this sense, I can say that the infinite relation, that is, the relation between the infinitely minute elements, refers to something finite. The mutual immanence of the infinite and relation is in the finite. It is in the finite itself that there is immanence of the relation and the infinitely minute elements. In order to gather together these three terms, pure relation, the infinite and the finite, what would I

say? I would say that the differential relation  $dy/dx$  tends towards a limit, and this limit is  $z$ ; it tends toward a limit, it tends toward the limit  $z$ , that is, the determination of the trigonometric tangent.

Is this ok? This really has to be very clear because, if you will, I believe that, if you accept... Here, I believe that we are really inside a nest, within a kind of extraordinarily rich knot of notions. When afterwards, the mathematicians will say “well no, it's barbaric to interpret infinitesimal calculus by the infinitely minute, that's not right, they've understood nothing,” etc., of course, they're right, but from what point of view? I don't even know from what point of view, but this is to pose the problem poorly, it seems to me, extremely poorly. The fact is that the 17th century, through its interpretation of infinitesimal calculus, finds a means of fusing three concepts, three key concepts, for mathematics and philosophy at the same time.

These three key concepts are the concepts of the infinite, relation and limit. So, if I extract a formulation of the infinite from the 17th century, I would say that something finite includes an infinity under a certain relation. So, this formulation can appear totally dull: something finite includes the infinite under a certain relation; in fact, this is extraordinarily original. It precisely marks an equilibrium point for 17th century thought, between the infinite and the finite, through a new theory of relations. So, when these guys then consider it as going without saying that in the least finite dimension, there is the infinite, you understand, when thereafter they constantly speak of the existence of God -- but this is much more interesting than is believed -- in the end, it doesn't involve God. It involves the richness of this implication of concepts: relation, infinity, limit. You see? I am letting you... This would be my first point: How is the individual a relation?

But, you see, the finite individual? Obviously, the finite individual, you will find that there is a limit at the level of the finite individual. This does not prevent there having been some infinite; this does not prevent there having been a relation, and this relation is composed, the relations of one individual are composed with another; and there is always a limit that marks the finitude of the individual, and there is always an infinity of a certain order that is involved by the relation. It's a funny vision of the world if you consider it to be a vision of the world, that is, if you agree to see that they didn't merely think like that, they *saw* like that. It was their very own taste, their manner of treating things. So, you understand why this was not through easy assimilation that when they see, that when the story of microscopes is revealed, they see a confirmation in this: the microscope is the instrument that gives us a sensible foreshadowing -- in this, they are not fools -- a sensible and confused foreshadowing of this activity of the infinite under any finite relation.

And Pascal's text on the infinities which is an extremely simple text -- and here as well, he was a great mathematician -- but when he tries to let us know how he sees the world, they don't at all need all their mathematical knowledge (*savoir*). The two console each other, the two reinforce each other. So, Pascal can create his text on the two infinities without any reference to mathematics whatsoever. He could have created his text on the two infinities as a mathematician; he didn't need to because he says extremely simple, but extremely original things. And in fact, the originality lies in this manner of fusing three concepts which, at first glance, have a link that doesn't go without saying, but then in the 17th century, there they want to show that the link is necessary. Once again, these are: relation, limit, infinite.

Good, time for a break... If you haven't understood this, I'll start over. This is essential, essential, essential. You have to grasp that, nonetheless, all this makes for a funny world. For us particularly, it's true, we no longer think like that. But what joy! I believe that we no longer think exactly like that. If you will, for us, it's thanks to knowing nothing about mathematics that what I am saying can be understood. For them, it was thanks to having knowledge of mathematics that they managed to understand all that. That doesn't mean that we're the ones that are correct. Obviously, what changed is a whole system of mathematics as conventions, but that changed only if you comprehend that modern mathematics also plots its concepts on sets of notions, on implications of notions of another, equally original type. So, there we are. Must I start over? Should I start over? Would it be good for me to start over? Do I have to... Yes?<sup>4</sup>

A student: [*Inaudible comment*]

Deleuze: That would be good. That would be illuminating. So, hold on, let me think about this. Can we say that the limit, that is, the finite, is the reason for knowledge (*raison de connaissance*) and the infinite is the reason for being (*raison d'être*) of the relation itself? Yes, this would be fine, this would be really fine, this would be very clear. You see, one could say that the limit towards which the relation tends is the reason for knowing (*connaitre*) the relation as independent of its terms, that is, of  $x$  and of  $y$ , and the infinite, the infinitely minute, is the reason for being (*raison d'être*) of the relation; in fact, it's the reason for being of  $dy/dx$ . Yes, we can absolutely say this. Did they say this? Wait; yes, they didn't say it as well, not as clearly. [That's] perfect. Yes, they necessarily said this since they said everything in the end, Descartes's formulation, the infinite conceived and not comprehended. That is, one does not comprehend the infinite because it is incomprehensible, but one conceives it. This is Descartes's great formulation: one can conceive it clearly and distinctly, but comprehending it is something else. So, one conceives it; there is a reason for knowledge (*connaissance*) of the infinite. So, there is a reason for knowing that is distinct from the reason for being. Comprehending would be grasping the reason for being, but we cannot grasp the reason for being of the infinite because, to do so, we would have to be adequate to God. And our understanding is merely finite. On the other hand, one can conceive the infinite, conceive it clearly and distinctly, thus one has a reason for knowing it. Yes, completely. Fine, I am saying, it's really necessary that you understand that, that this be crystal clear because my second point is so greatly going to depend on all that... [Pause] Is this ok?

So, let me insist once again that in the end, philosophy has to conquer its practical exercises. Practical exercises in philosophy would have to be thought experiments (*expériences*). The notion of thought experiments is a German notion; this literally means experiments that one can only do through thought. This doesn't mean interior experiences or psychological experiences. Practical exercises would really be curious. They would have the title of a practical exercise, practical exercise number 12, for example. So, this is how we could reestablish notes in philosophy; you would refer to your practical exercise number 12. So, there we are. So, this would be for the next time: construct a motif, not a shape (*figure*) because a shape is something felt (*quelque chose de sensible*); construct any motif whatsoever, your choice, that brings together the three themes, and only them, of the infinity of the relation and of the limit, and if needed, make it into a drawing. This would be a thought experiment, you see?... No? You don't want to do that?

Claire Parnet: We don't have class next week.

Deleuze: Oh yes, we do, for next week, yes, yes, for next week. If you want this course credit, this will be for next week. There we are... -- Oh, let me mention that this week is the last week that I am still accepting the little forms for the course credit. – So, is all this truly ok? Truly? I don't need to go back over this? That's a shame.<sup>5</sup>

So, let's pass on, alas, to the second point. You see how it links up with the first point because I've had to invoke the notion of limit. In fact, in order to account for the immanence of the infinite in the relation, once again, it seems to me, the more I repeat this, it's odd, the more I tell myself this, but in fact, it's very important, the following thesis which is that there is an immanence of the infinite within the relation. Notice, here we are, I'm pointing out that I am returning to the preceding point so that you will feel its importance.

So, I believe, for you first, the logic of relations, of relations, is a fundamental thing for philosophy, and alas, French philosophy has never been very interested in this aspect. But the logic of relations has been one of the great creations of the English and the Americans. But there were two stages, I would say. There is a stage that is very well known which is precisely the stage, finally, let's say, that it is Anglo-Saxon, the logic of relations such as it was developed starting from [Bertrand] Russell, that is, such as it was developed at the end of the 19th century, start of the 20th. And this logic of relations claims to be founded on this: the independence of the relation in relation to its terms, but this independence of the relation in relation to its terms, this autonomy of the relation in relation to its terms, is founded on finite considerations. They are founded on a finitism. For example, Russell even has an atomist period in order to develop his logic of relations.

You see, what I mean is that this stage had been prepared by a very, very different stage. I would say that the great classical stage of the theory of relations is not at all like they say. They say that earlier, people confused the logic of relations and the logic of attribution. They confused two types of judgment: the judgment of relation (Pierre is smaller than Paul) and the judgment of attribution (Pierre is yellow or white or red), thus they had no consciousness of relations. It's not like that at all, it's not like that at all. In so-called classical thought, there is a great awareness, there is a fundamental realization of the independence of the relation in relation to relations, only this realization passes through the infinite. The thought of the relation as pure relation can only be made in reference to the infinite. Once again, this is one of the highly original moments of the 17th century.

Fine, so I am returning to my second theme. You recall, my second theme is that the individual is power of action (*puissance*). This I just mentioned very vaguely, giving the sense of the formulation: the individual is relation, the individual is not substance, it is relation. My second term, you recall, was that the individual is not form, it is power of action. Why does this follow? It's because what I just said about the differential relation  $0/0$ , which is not equal to zero but tends towards a limit, I immediately say: consider that when you say this, and when you propose the very special concept, here as well, subsequent mathematicians will denounce it. But if they were correct in denouncing it, doesn't it still remain as a fundamental philosophical concept? When 17th century philosophers propose this theme of tending toward a limit, the tension

towards a limit, this whole idea of tendency in the 17th century, there you rediscover, for example, in Spinoza at the level of a Spinozist concept, that of *conatus* -- each thing tends to persevere in its being, each thing strives since, in Latin, "strive" is stated as "conor," *conatus*, the effort or tendency -- there we find ourselves again facing a new concept. I would like for you to sense the extent to which all these concepts are linked from the point of view of a conceptual creation -- tending toward a limit, that's what power of action is. Concretely, we will experience as power of action everything that is grasped under the aspect of tending toward a limit.

You see, I am saying that if the limit is grasped starting from a notion of power of action, specifically, tending toward a limit, in terms of the slightest, the most rudimentary infinitesimal calculus, in terms of vulgarization, well yes, the polygon that multiplies its sides tends towards a limit, which is the curved line. The limit is precisely the moment when the angular line, by dint of multiplying its sides -- can we say "reconnect" (*rejoint*)? No, since it goes to infinity, but tension toward a limit is thus the tension toward a limit now implicating the infinite -- The polygon, insofar as it multiplies its sides to infinity, tends towards the circle.

I am saying and I would almost like to muse (*rêver*) in front of you exactly as I did for the preceding theme. What change does this bring about in the notion of limit, because the limit was a well-known notion? But one did not speak of tending towards a limit. The limit is a key philosophical concept. Again, in my efforts to make our work somewhat useful for you by seeing that it intervenes as creation in philosophy, I am taking this once again as a locus of the creation of concepts because, for example, there occurs a veritable mutation from the point of view of thought in the manner of thinking a concept. What was a limit? The Greeks have a word, and I am citing it at the same time as foreign words because this is very important in Greek philosophy: it's "peras." [*Deleuze spells it out*]. *Peras*, in ancient Greek, this is limit. But, at the simplest level, what do they call limit? There are all sorts of theories of limit, and even Plato will create a great theory of the limit. Hey, Plato creates a great theory of the limit. That must be of interest for us.

You indeed see my purpose. So that you might follow this well, it concerns posing questions about this conception of limit before the 17th century that was clearly of an entirely different nature. And it's quite simple; I mean, however complicated Plato's theory itself might be, there is a point that everyone can understand: what did they call limits, the surveyors of that period? The limit is contours, it is contours, it is points, it is end points (*termes*), there we are. The limit is an end, a *terminus*. A volume has surfaces for its limit. For example, a cube is limited by four squares... Six! Six! [*Laughter*] Six squares... Something was bothering me there: six squares. There, whew! A line segment is limited by two endpoints. There we are, I'm not venturing any farther because... [*Laughter*] [*Pause*]

Plato, in a very beautiful work called the *Timaeus*, creates a great theory of shapes and their limits conceived as contours.<sup>6</sup> And why can this conception of the limit as contour be considered as the basis for what one could call a certain form of idealism? Follow me closely. Necessarily this is very well reconciled: the limit is the contour of the form, whether the form is purely thought or sensible. In any case, one will call "limit" the contour of the form, and this is very easily reconciled with an idealism because if the limit is the contour of the form, at the extreme, what does it matter to me what there is between the limits? If I were to put some sand, some

bronze or some thought matter, some intelligible matter, between my limits, this will always be a cube or a circle. [*Pause*]

In other words, essence is the form itself related to its contour. I could speak of the pure circle because there is a pure contour of the circle. I could speak of a pure cube without specifying what it involves. And I would name these the idea of the circle, the idea of the cube. Hence the importance of the contour-"peras" in Plato's philosophy in which the idea will be very exactly – very exactly, not because this is so terribly complicated what I'm saying, I'm deriving from it some little thing – the idea will be the form related to its intelligible contour. You see? In other words, in the idea of the contour-limit, Greek philosophy finds a very fundamental confirmation for its own, I would say, its own abstraction. Not that it is more abstract than another philosophy, but it sees the justification of the abstraction, such as it conceives this, namely, the abstraction of ideas. [*Pause*]

Fine, here, I have just introduced the philosophical result of this contour-limit idea. Henceforth the individual will be the form related to its contour. If I look for something to which such a conception practically applies, I would say, in order to return a bit here to what we were discussing earlier regarding painting, for example, I would say that the form related to its contour is, par excellence, a sensible world of the a tactile-optical kind.<sup>7</sup> The optical form is related, if only through the eye, if only indirectly, to a tactile contour. So, that can be the finger of pure spirit; the contour inevitably has a kind of tactile reference, and if one speaks of the circle or the cube as a pure idea, to the extent that one defines it by its contour and one relates the intelligible form to its contour, there is a reference, however indirect it may be, to a tactile determination.

And here I once again find a confirmation: it's completely wrong, once again, to define the Greek world as the world of light; it's an optical world, of course, it's even in this that they discovered, that they brought forth into art, into philosophy, an optical world, but not at all a pure optical world. The optical world that the Greeks promote is already sufficiently confirmed by the word that they use to speak of the idea: *eidos*, *eidos* which is a term that refers to visuality, to the visible, to the sight of mind. But this sight of the mind is not purely optical. It is optical-tactile. Why? Because the visible form is related, however indirectly it may be, to the tactile outline.

And the practical experience then, it's not surprising that someone who reacts against Platonist idealism, in the name of a certain technological inspiration, is Aristotle. But if you consider Aristotle, there the tactile reference of the Greek optical world appears quite evidently in an extremely simple theory which consists in saying that substance, or rather sensible substances, are composites of form and matter, and it's the form that's essential. It's the form that is essential, and what is the form? Well, precisely, the form is related to its contour, and the experience constantly invoked by Aristotle is what? It's that of the sculptor, it's the sculptor, and that should interest us greatly because Greek statuary has the greatest importance in this optical world; it's an optical world, but a world of sculpture, that is, one in which the form is determined according to a tactile contour, in which optical form is determined as a function, if only indirectly, of a tactile contour. Everything happens as if the visible form were unthinkable outside of a tactile mold. That is the Greek equilibrium. That is, it's very own equilibrium. It's a kind of equilibrium... [*Interruption of the recording*] [46:42]



## Part 2

Georges Comtesse : ...The very possibility of seeing the *eidōs* as conditioned by the separation of soul and sensible body...

Deleuze: Yes, well, no, I was thinking that you had... It's perhaps because I went too fast. I mean, taken literally, you are completely correct. The *eidōs* is grasped by the soul, and that tells us nothing yet. That is, the *eidōs*, the pure idea is obviously graspable only by the pure soul. My question is entirely different, notably as pure soul, we can only speak of it, according to Plato himself, by analogy given that we only experience our soul insofar as it is bound to a body; we can only speak of it by analogy. So, from the point of view of analogy, I would always have said, okay, it's the pure soul that grasps the pure idea, and there's nothing corporeal in this. It's a purely intellectual or spiritual grasp. But does this pure soul that grasps the idea proceed in the manner of an eye, "in the manner of", or does it proceed rather in the manner of the sense of touch, touch which would then be purely spiritual, like the eye which would be purely spiritual? That is, this eye is the third eye, just as this touch would be the eleventh finger. This would be a "manner of speaking", but we definitely need the analogy. Just like Plato, we definitely need analogical reasoning.

Then all my remarks consist in saying that the pure soul no more has, in complete reality, an eye than it has a sense of touch; it is in relation with the ideas. You are completely correct, but this does not prevent the philosopher, in order to speak of this apprehension of the idea by the soul, from having to ask himself: what is the role of an *analogon* of the eye and an *analogon* of touch, an analogue of the eye and an analogue of touch in the grasping of the idea? To which I reply, there are indeed these two *analogia*... [Laughter, and Deleuze laughs as well] There are indeed two analogues since the idea is constantly said to be seen by the soul, is only seen by the soul to the extent that it refers also to a contour that is constituted, that is the constitutive element in the viewed form, and this contour refers to analogue of touch. Ok?... Not entirely?

Comtesse: The limit is not just the contour...

Deleuze: Okay, okay...

Comtesse: ... it's also the force that contains a power of action... [Inaudible words] that Plato senses as a demonic power... [Inaudible]

Deleuze: There, well yes, there, we agree...

Comtesse: ... a terrifying power which has indeed brought about the deadly union of soul and body of which philosophy is the separation.

Deleuze: Yes, but then you go right past me by saying that I am more correct than I would have liked to have been because that amounts to saying: careful, Plato has a very strong presentiment of a whole conception of the limit which would no longer be the contour-limit, but precisely it appears more or less demonic because everything depends on the texts -- okay, okay -- and it is this world that we must at the same time, of course, contemplate, but ward off. You see, he will

save himself through the contour, even if there are some of his texts that prepare a completely different conception of the limit. And there, I thought you were going into all that because it's very important. In fact, what you're saying is like these are little notations on... I mean, it's very subtle. You are correcting me... Comtesse there, he has just given me, it seems to me, an example in which he himself is correcting what I am saying. In fact, it's so much more complicated; there I agree. It's very complicated. That doesn't prevent... This is a direction. If you believe that I am stating an absolute truth, no, I am not stating an absolute truth. I am saying what seems to me a tendency of this Greek thought. But it's always more complicated than what is said, you see? [Pause] Okay, well, that's this conception of ... this first conception of the contour-limit.

And what happens several centuries later when, in order to create a completely different conception of the limit, the most varied signs come to us from it, and come at us from all sides? As a result, I am numbering my examples:

First example with the Stoics, first example. The Stoics lay into Plato quite violently, according to the texts from them that remain for us to consult. They lay into Plato violently, and I am asking you, in all the examples that I am going to provide, to keep in the back of your mind that this perhaps, in some ways, not exclusively, is going to culminate, all the examples that I provide, culminate with Spinoza.

So, a first example, the Stoics. The Stoics are not the Greeks; they are at the edge (*pourtour*) of the Greek world. At heart, we could always revise this and say that it's going to be very important. They are on the contours of the Greek world. And this Greek world has changed a lot; literally, it had so fully destroyed the theme of rivalry of the determined cities as there had been in Alexander's dream. So, there had been the problem of the Greek world, how to develop the Greek world. Fine, this was something else for the Greeks than how to create Europe. You know, that involved so many things; you cannot understand Aristotle, or you cannot understand the Neo-Platonists if you have merely some vague ideas about everything going on historically at that time.

And here we have these Stoics who are hardly Greeks, who are half barbarian, half Greek, who are really strange people, that are attacking Plato, and starting from what? However, it's not that Plato was lacking for ideas that had already come from the Orient; these were not the same ones, we must believe, or else there is a new Oriental current. There's a great German author who wrote a book that was a marvel, named *La Grèce entre les bras de l'Orient* [Greece in the Arms of the Orient]<sup>8</sup> to designate this era precisely, this era that begins with Stoicism, the ancient Stoicism – this is a lovely title, *La Grèce entre les bras de l'Orient* – well, these non-Greek Greeks, these Stoics, what do they say?

They say: well, this is strange, this is very strange how... with Plato and his Ideas, these are not what we need, these are not what we need, this is an indefensible conception. They say, in the end, the contour is something, and what is it? The contour is something, it's non-being. In fact, the contour of something is the spot where the thing ceases to be. The contour of the square is not at all the spot where the square is located. You see that it's very strong as an objection. Great objections are always very simple. They take literally this Platonism that I've sketched out quite summarily, namely that the intelligible form is the form related to a spiritual pact, that is, it's the

shape related to the contour. Or else, the sculptor's experience. They will say as well, against Aristotle, but the example of the sculptor is completely artificial, the sculptor's mold. It's not natural! Nature never proceeds by molding. These [objections] seem quite simple, but what's strong is when one manages to tell someone: well yes, he chooses examples, but these examples are not relevant. If you want to know, the Stoics say, if you want to understand something about the problems of limits, one cannot choose the case of the sculptor since the sculptor's problem is a problem of pure artifice, notably of molding something else. In what case does nature proceed by way of molds? Nature doesn't proceed by way of mold, or else it would be necessary to count them. It's certainly only in superficial phenomena that nature proceeds by way of molds. These are so-called superficial phenomena precisely because they affect surfaces, but nature, in the depths (*en profondeur*), does not proceed by way of molds.

For example, when I have the joy of having a child who resembles me, I have not sent out a mold. [*Laughter*] Notice that biologists, until the eighteenth century, grasped onto the idea of the mold; there are biologists, I think, into the 18th century who insisted on the spermatozoon analogous to a mold; this is not very rational. On that point, [the Count] Buffon had great ideas – hey, this is getting me off track, but that doesn't matter -- Buffon said that if one wants to comprehend something of the production of living things, it would be necessary to work one's way up to the idea of an internal mold. Magnificent! Buffon's concept of an "internal mold" could be useful to us. An internal mold means what? He says, obviously – here, I am citing Buffon nearly word for word, he had a great idea -- it's awkward because one could just as well speak of a massive surface. He says that the internal mold is a contradictory concept. There are cases in which one is obliged to think by means of a contradictory concept. The mold, by definition, is external. It concerns surfaces. One does not mold the interior. If you mold the interior, that means you have placed the interior outside.<sup>9</sup>

So, fine, then, this is to say that already for the living thing, the theme of the mold does not work. Nevertheless, there is a limit to the living thing. The Stoics are in the process of grasping onto something very strong: life does not proceed by molding. Aristotle chose artificial examples. And on Plato, they let loose even more brutally. The Stoics say, well, you understand, what is all this about the idea of the square, as if it were unimportant that the square was made of wood, or of marble, or of whatever you like? But this matters a lot. This just an awful thing, the Stoics say. When one defines a shape by its contours, at that very moment, everything that happens inside is just the same. This is how, the Stoics say, Plato was able to abstract the pure idea. They are denouncing a kind of sleight-of-hand (*tour de passe-passe*). So, this is quite unfair regarding Plato, obviously.

What interests me isn't whether this is or isn't fair to Plato; what interests me is: what do they have to say? And what the Stoics are saying stops being simple. Understand? They are in the process of creating for themselves a totally different image of the limit. And in fact, what is their example that they opposed to Aristotle's sculptor, that is, to the exterior mold, to the optical-tactile shape? They will oppose problems of vitality; what kinds of problems of vitality? Where does action stop? Hey, this isn't "where does the form stop?" Answer: At the contour. Fine, form stops at the contour. With this, there's no contradiction. But saying that holds no interest. It's of no interest because the question is not at all where a form stops, because this is already an

abstract and artificial question. The true question is: where does an action stop? And there, you aren't going to be able to designate contours. What does that mean?

There's a very lovely text. Second practical exercise: Does everything have a contour? Bibliography for the practical exercise: a great contemporary American author named [Gregory] Bateson wrote a book in two volumes, recently translated into French, a book titled *Steps to an Ecology of Mind* in which there's an admirable text on the language of dolphins and all sorts of other things at once entertaining and instructive. Bateson, who is a genius, a very great man, has written a very amusing text that is called "Why do things have outlines?" He gives examples; he talks to his daughter who is not terribly clever. [Laughter] He says, well then yes, you see, we are speaking right at this moment, so does our conversation have an outline [contour]?

This is interesting because when your professor used to scold you, back when you still did your homework – but this will return! – when you did your homework, your essays, when a professor scolded you for getting off the topic – “off the topic” (*hors du sujet*), let's take the expression literally, "outside the subject" -- does that mean that the topic or subject has a contour? Perhaps. Otherwise would that mean "outside the limits"? Is this spatial? At first glance, it seems spatial. But is it the same space? Do "outside the limits" and "outside the contour" belong to the same space? Does the conversation have a contour? Does my course today have a contour? My reply is yes, it has a contour. One can touch it. Fine, we've gotten a bit into this problem: does every pictorial form have an outline? It's not certain.

So, let's return to these Stoics. I'm dropping Bateson; you see, it was a problem: what are the different senses of “outside the subject”? This is our second practical exercise. So, for next week, you must turn in two practical exercises. [Laughter] Don't forget! And draw the contour of a conversation. You'll see if you need a firm line or not. So, fine, what's their favorite example? It's how far does the action of a seed go? That's good, that's really good! A seed has a limit, but what is its limit? Still, no shape? Yes, a seed indeed has a contour, but that's not at all what's in question. No doubt, there would be two limits? I can certainly follow the seed's contour with my finger, but what will I have understood about the seed? When I then learn that a sunflower seed lost in a wall is capable of blowing out that wall, ah, the sunflower seed can make a wall explode, something having such a small contour. How far does the sunflower seed go, does that mean how far does its surface go? No, the Stoics say, the surface is where the seed ends. In their theory of the statement (*énoncé*), they will say that the surface states exactly what the seed is not, that is, where the seed is no longer, but about what the seed is, that tells us nothing.

So, they are very forceful as far as Plato is concerned. They show up and, about Plato, they say that, with his theory of ideas, he tells us very well what things are not, but he tells us nothing about what things are. The Stoics cry out triumphantly: things are bodies, bodies and not ideas. Things are bodies, which means what? That means that things are actions, and the limit of something is the limit of its action, and not the contour of its shape.

An even simpler example: you are walking in the forest, eh? You're walking in the dense forest, in other words, in the powerful forest, and you're afraid, and at last, you move onward, and little by little the forest thins out. You are pleased, and you reach a spot, and you say, "whew, here's the edge." The edge of the forest is a limit. If that's a limit, then fine, ok. Does this mean that the

forest is defined by its contour? It's a limit of what? Is it a limit to the form of the forest? One can say this. It's not that one cannot say it, one can say it, but that's a kind of limit that is poorly defined as limit of the form of the forest. In fact, what is it? It's a limit to the action of the forest, that is, the forest that had so much power of action reaches the limit of its power of action; it can no longer bite into the terrain, as it's thinning out. It's thinning out, and what reveals that this is not a contour is the fact that we cannot even specify the precise moment at which there is no more forest. Were you already inside the undergrowth? How did you pass from the forest into the undergrowth, and from the undergrowth into the thicket, all that? I mean, really, I don't need to force myself much to say: there was a tendency, and this time, the limit is not separable, a kind of tension towards the limit.

This is a dynamic limit that is opposed to a contour-limit. The thing has no other limit than the limit of its power of action or of its action. The thing is thus power of action and not form. The forest is not defined by a form; it is defined by a power of action: power of action to create the trees all the way to the moment when it can no longer do so. Hence, the question that I have for the forest is not: what is your shape and what are your contours? The only question that I have for the forest is: what is your power of action? That is, how far will you go?

That is what the Stoics discover and what authorizes them to say: everything is a body. Understand, when they say that everything is a body, they don't simply mean that all things are sensible, because they would not escape from the Platonist point of view. If they were to define the sensible thing by form and contour, that would hold no interest. But when they say that everything is a body, what do they mean? They mean something quite simple. A circle does not extend into space, does not extend, there's always tension. A circle does not extend in space if it's made of wood or of marble. A circle does not extend into space in the same way. Moreover, "everything is a body" will signify that a red circle and a blue circle do not extend into space in the same way, something that all painters and even more than painters know quite well.

So, this is tension, and then they are going to define – this isn't anything of genius – the ancient Stoics are going to define things in what way? When they say that all things are bodies, they mean that all things are defined not by form or contour, but in their language, through *tonos*, *tonos*, that is, the kind of contracted effort that defines the thing. If you don't find the contraction, the contracted force, the embryonic force that is in the thing, if you don't find the thing, you have no understanding (*ne connaissez pas*) of the thing, what Spinoza takes up again long after with the expression "what can a body do?" "What can a body do?" Here we have the first example, simply to have you sense that the notion of limit completely changes its meaning.

Second example. Here I've considered it, but it's still part of my concern for preparing us for the second semester in what we undertake on painting.<sup>10</sup> After the Stoics, at the beginning of Christianity, and yet not necessarily in Christian authors, toward the second or third century CE, a quite extraordinary type of philosophy develops, certainly extremely new, which is also in the new Greek world, called the Neo-Platonist school. The prefix "neo", of Neo-Platonist, is particularly well founded because, of course, it's by basing themselves on texts, and notably, I assume, texts to which Comtesse referred, it's by basing themselves on some extremely important texts by Plato that the Neo-Platonists will completely decenter all of Platonism. As a

result, in a certain sense, one could say that all of it was already in Plato. Only it was as if taken into an aggregate that was not Plato's.

One of the greatest Platonists was Plotinus. And from Plotinus has been gathered a kind of great short book, quite admirable, called and named *The Enneads*. So, I am advising you, for those that this might interest, to browse randomly, without knowing anything about Plotinus, this admirable text from the point of view that concerns us, which is *The Enneads* IV, book five, book five of the fourth *Ennead*. You will see a kind of prodigious course or discourse or poetic meditation on what? On light, on light, an admirable text, a prodigious text in which Plotinus will try to show that light can be comprehended neither as a function of the emitting body, nor as a function of the receiving body. And his problem is that light belongs to these odd things that, for Plotinus, are going to be the true ideal things. – Here there is a kind of very, very astonishing short-circuiting of Plato – Light belongs to these ideal things that are recognized in this way: one can no longer say that it begins here, and it ends there. Where does a light end? What a story! This is a prodigious text.

You'll ask me, why couldn't one create the same text three centuries earlier? Ah, it's nothing; if we don't understand anything about these things, we still understand everything, I believe, about the thought and the movement of thought. Why did these meditations on pure light appear in the so-called Alexandrine world? I am saying that it's kind of a manifesto, we could call it a manifesto for a pure optical world. Light has no tactile limit, and nevertheless there is certainly a limit, a very special limit, but this is not at all a limit such that I could say it begins here and it ends there. No, I couldn't say that. In other words, light goes as far as its power of action goes.

In other words, Plotinus is at once hostile to the Stoics; he calls himself a Platonist. But he had a premonition of the kind of reversal (*retournement*) of Platonism that he is in the process of creating. I believe that it's with Plotinus that a pure optical world begins in philosophy. Idealities will no longer be only optical, that is, they will be luminous, without any tactile reference. Henceforth, the optical limit is of a completely different nature. Light scours the shadows. Does shadow form part of light? Yes, it forms a part of light, and you will have a light-shadow gradation or a shadow-light gradation that will develop space. And what are they in the process of finding? That deeper than space, there is spatialization, that space is never... [*Deleuze does not finish this*] and that, Plato didn't know (*savait*).

On this point, when this idea imposes itself, of a spatialization deeper than space, we can always start to reread Plato and say, but yes, [*Deleuze laughs*] but yes, there are a thousand texts by Plato that prepared this. But this is where I always invoke the need for a pact in philosophy. If you say it's already in Plato, you deprive yourself of a lot of joy, and then you are led... one step further and you make huge mistakes. It's in Plato, but virtually. There are Plato texts on light, okay, okay. You find everything you want; it's up to you to possess a kind of art of nuances.

That still doesn't prevent then, if you read Plato's texts on light, for example, the end of book six of *The Republic*, and set it next to Plotinus's texts that I cited for you, from the fourth *Ennead*, if you read them side by side, you see that, you immediately understand, you don't know why, but you immediately accept the idea that several centuries had to pass between one text and the other, that it's not the same world. You know it for certain before knowing why, that the manner

in which Plotinus extracts the texts from Plato, and thus he develops for himself a theme of pure light, could not be Platonist because, once again, Plato's Greek world – here, I am saying this in order to summarize, to be more precise – was not a world that was optical, but a tactile-optical world, whereas the discovery of a pure light and of the sufficiency of light to constitute a world implies that, beneath space, one has discovered the phenomenon of spatialization. This is not a Platonist idea, spatialization of space, or one can find seeds of it in the *Timeus*, but you will see that it's not... No.

Space grasped as the product of an expansion, that is, space is second in relation to expansion and not first, space is the result of an expansion; that's a bizarre idea that, in my view, even one could say, for a classical Greek, would have been incomprehensible. What does an expansion mean, one that does not already presuppose a space? It's not easy as an idea. Lots of things would be necessary to be discovered, to occur, in order for a deepening of Pythagorism, through the idea of..., through all sorts of oriental influences. It's an idea that comes from the Orient. I don't know why I say that; I am not risking much in being wrong. That just feels like the Orient, that light could be spatializing. It's not light that is in space, it's light that constitutes space. This is not a Greek idea. You know, everything starts... this, one feels that... They say, ah yes, well no, that's not an idea from around here; that thing comes from somewhere else. You have to read some philosophy; you have to be very sensitive to these kinds of things. Fine.

Here's a third example, after the Stoics and the Greeks, several centuries later. And there explodes – here I'm going quickly because it's like a confirmation – there explodes, what explodes? A tremendously important art form explodes, namely, art called Byzantine art. It's a problem for art critics to discover how Byzantine art remains linked to classical Greek art while at the same time, from another point of view, it breaks completely with classical Greek art. If I take the analyses of one of the best critics in this regard, an Austrian author, I believe, [Alois] Riegl, he says something extremely rigorous, as one of the best specialists on Byzantine art.

He says – but you understand, in Greek art, of course, it's already quite complicated, but in general, it's mostly in general that I am saying, it's in order to give you some reference points -- you have the primacy of the foreground (*avant-plan*). The great difference between Greek art and Egyptian art is that, in Greek art, the distinction is made between the foreground and the background (*arrière-plan*), while in Egyptian art, broadly speaking, the two planes are on the same plane, for example, all Egyptian bas-relief. – What I am saying is quite a summary, as I am summarizing from Riegl's viewpoint. – He says, fine, a shift occurs in Greek art: it's the Greek temple, it's the advent, says Riegl with a very enjoyable phrase, it's the advent of the cube. – It's the advent [*Deleuze hesitates, having trouble speaking*] It's just that I can't because my throat is hoarse; alas, I just can't – It's the advent of the cube, the cube, six sides, whereas for the Egyptians, what was it? It was the pyramid, and the pyramid has plane surfaces, you see? Wherever you set yourself, you are always on a plane surface. It's disturbing. With the pyramid, it's diabolical because this is a way of hiding the volume. Very strange! Clearly, they cram the volume into a little cube which is the funerary chamber, and they set up plane surfaces, isosceles triangles, to hide the cube. The Egyptians are ashamed of the cube. The cube is the enemy, it's the dark, the obscure, it's the tactile. So, they do that; it's on the same plane.

The Greeks invent an amazing thing: they invent the cube. They aren't ashamed of the cube. They make cubical temples, that is, they displace the foreground and the background. But, Riegl says, fine, look closely at all Greek works: there is a primacy of the foreground, and the primacy of the foreground is linked to the form because it's the form that has contour. Fine, the primacy of the foreground, primacy of the form, the relation of form with contour, all this is unified. It's for this reason that he will define the Greek world as a tactile-optical world. [Pause] Do you follow?

So, here, with the Byzantines, it's quite odd. Look at the mosaics; they get nested (*nichent*), they're moved into niches; they get moved back. It's really funny! And space? As is said, there is no depth in Byzantine art, but why is there no depth in Byzantine art? For a very simple reason, it's that depth is between me and the image. One of the dramas of Byzantine art is a modern drama, specifically that because of the camera, yet again, everything comes from the misdeeds of the photo: the mosaics get photographed, that is, they are shot from only ten centimeters [four feet], and this is shameful! It's shameful! The photographers should be killed since, by definition, this is backwards, it's backward, since all of Byzantine depth is the space between the spectator and the mosaic. If you suppress this space, it's as if, I don't know, it's like you were to look at a painting outside of any condition of perception. It's hideous.

Fine, you understand, in other words, the Byzantines, seemingly innocent, unleash an enormous strongarm move, notably they privilege the background, and the entire shape will emerge from the background. The whole image will emerge from the background. But, at that very moment, as if by chance, the formula of the shape or the image is no longer form-contour. Form-contour was for Greek sculpture. It's no longer form-contour. And nevertheless, there is indeed a limit, and still, you will tell me, there are even contours, even in mosaics; these are very sharp contours, but this is not what acts, that's not what's interesting. The work no longer acts that way, whereas in Greek statuary, it's indeed the contour that acts, the contour insofar as it captures the light. But there, that's not at all what happens in Byzantine mosaic; it's no longer form-contour. What am I saying it is? It's light-color, that is, what defines, in the proper sense of "to define," notably, what marks the limits of something – to define is to mark limits; a definition is an indication of a limit – what defines the Byzantine shape is no longer form-contour, but rather the couple light-color, that is, that the shape continues all the way to where the light goes that it captures or emits, and all the way to where color goes, the color of which [the shape is] composed. Hence, in fact, the effect on the spectator is prodigious, namely, that a black eye goes exactly as far as this blackness shines. Hence the expression of these shapes in which the face is consumed by the eyes.

In other words, there is no longer a contour of the shape; there is an expansion of light-color, and the shape will go all the way to where it acts, through light and through color. I can say: it's the reversal of the Greek world. I can say both at the same time. But yes, that comes out of the Greek world. Only, what the Greeks weren't able to do, or what they hadn't even considered doing, was this liberation of light and color. It's with Byzantine art, as everyone says or as Riegl says, it's with Byzantine art that color and light are liberated in relation to space. Why? Because what they discover is that light and color are spatializing. Thus, art must not be an art of space, it must be an art of the spatialization of space. [Pause] So, I would say that, if you will, this is an idea that goes without saying: between Byzantine art from the point of view of mosaic painting, for



example, and architecture as well, and the slightly earlier texts on light by Plotinus, there is an obvious resonance. What is affirmed is the same conception of the limit.

The final example that I would like to work through quickly. What does it mean, this story about... I mean, now, there are two sorts of limits. I could multiply my oppositions between limit-limit. [First] there is a contour-limit and there is a tension-limit; second, there is a space-limit, and there is a spatialization-limit; [*End of Web Deleuze transcript and translation*] there's a contour-limit, yes again, and a light-color limit; there is a state (*état*) limit, there is a *terminus* limit, a tension-limit. So, what interests me, in one sense, is not at all the comments by contemporary mathematicians, for example, about the mathematical nonsense that the expression "tending toward a limit" would represent today. The only thing that would interest me, rather, in modern mathematicians is what their own concepts are, what their positive concepts are. But regarding the past, what interests me is in what way the idea of tending toward a limit is truly founded on all sorts of experiences, experiences of thought, aesthetic experiences that completely changed [*End of Paris 8 transcript*, 93:05] both the conception of the individual and of form and light... and color, etc. etc.

And to state this even more briefly, I am selecting a last example here that I've used for other things, in other seminar years. I am saying, let's oppose, to be quite simple, yes, we have to... [*Interruption of the recording*] [1:33:27]

### Part 3

... How do men operate distributions? Men operate distributions by sharing a space. So, for example, in a large square, they make a small square; this is called the cadaster. This square is yours, this one is mine, etc. Okay, you see? We share a space. I would say, it's a contour-limit conception. There is more: where my square ends, and where yours starts, we will put down a marker (*borne*). How does one say "marker" in Latin? It's obviously -- you can invent it yourself; you don't have to look it up in the dictionary -- "marker" can only be said *terminus*. This is the conception of the contour-limit. [*Pause*]

But what do cows do in relation to space? They do much better than that. Notice, the two conceptions overlap. You take a meadow, eh? It doesn't matter if it's bounded or not. It can be bounded; in that case, it's closed off, contour-limit. But it can have, it can even have a limit of another type, that is, it is a clearing meadow (*prairie claire*). It's not closed off, therefore, but the further we go, the more the forest begins. So, it's a meadow that tends towards the forest limit, without us being able to say, oh well, it's forest or it's not anymore, it's the meadow. You see? This is a dynamic conception of the limit.

So, well, cows, how... Cows know, and so do farmers, that a meadow cannot feed just any number of cows whatsoever. This is even what we call natural selection. There are always animals that die if there are too many compared to the milieu. How are the animals, the cows going to manage? The cows don't create small squares in the meadow, saying this is my square, that one's yours. How do they manage? Instead of distributing space, they distribute themselves in space. What does this mean? It doesn't exclude hierarchical relations. Notice, there is the chief

cow; there is the more prestigious cow, the one that [reserves] the best..., I can no longer say, square, the best zone, a cow zone.

What will the cow zone be? It's the point to which the cow can go in its daily appetite, that is, the grassy area that it can graze with its rough tongue, eh? I am fully within a Stoic example. This is a funny limit. There is no barrier there. The appetite limit of a cow, you cannot say that it starts with a particular blade of grass and ends with another particular blade of grass. It's a limit of power of action (*puissance*). And somehow, the cows manage to get along. You know from empirical science that it takes so much land to feed a cow. So, if you are a good farmer, you are not going to put twenty cows on a plot of land that could only feed ten because there will be ten that are likely to die, especially the small calves which... -- But, at this idea, our hearts start aching, [*Laughter*] the little calves that are dying -- fine, so you're going to put ten cows more or less onto a terrain for ten cows, but you're not going to give each cow a square. It's not the contour-limit; it's the power of action limit. Cows will distribute themselves according to their relations, including their hierarchical relations, in such a way that, over a particular space of time, the whole of the meadow is grazed, in a dynamic way. And there will be territories, but territories that will not be marked by barriers.

What is an animal's territory? It is up to where its power of action reaches. And what is it that's called ethology, ethology, which is just a synonym for ethics? It's the science of powers of action and limits in this second sense. And what is the ethical cry? "What can a body do?" Always the same thing, what can a body do? It's: what it is capable of, what is its power of action? How will we see its power of action? Through the limit, in the dynamic sense. However, once again, the contour-limit lets us completely escape the dynamic limit. The dynamic limit is spatializing whereas the contour-limit supposes a ready-made space, a measured space. You follow me?

So, finally, because we can't take it anymore, any questions on all this? It's very simple. I would like you to feel something that's happening, in short, something very important, when the limit was no longer conceived of, you understand, even politically, because it poses, in fact, political problems with the conception, at that time, of territories. Territories are dynamic expressions and no longer geometric contours. It is no longer the surveyor who becomes the master of things; the surveyor no longer knows anything. It's no longer a question of surveying. No. Geometry must be overwhelmed by a much deeper dynamic. We're not far from the Renaissance world. Even the regime of violence changes completely because think of what the Greeks called violence. What the classical Greeks called violence is violating the limits. In what way, violating limits? Violating limits as they understand them, violating the contour-limits. They say it very well: everyone has their share (*lot*). Whether he likes it or not, everyone has their share. If someone violate the limits of his share, that is, his property, this is where the gods will drive them crazy. But then, the conception changes singularly.

So, think about this. Well, you can do the practical exercises, I think, three practical exercises for next week: what is a border? [*Pause*] What is a border? Is this the limit in the sense of contour, or is it the dynamic limit? It depends on the times, it depends on the location, it depends on history, it depends on geography, it depends on a thousand things.

So, let's go back to Spinoza a little bit more strongly. Why does Spinoza... There are points on which -- I'm going quickly before finishing -- because there are points on which Spinoza, there is not even a problem, he inherits from all that. Spinoza has a lot to do with Stoicism instead... There is also an absolute criticism of Ideas, with a capital I, separate Ideas. There is a famous Spinoza expression that is always quoted, but very often it's quoted separated from its context. And it's a shame because when we see the context, we are completely interested. This is the formula, "all determination is negation"; in Latin, *omnis determinatio negatio est*, all determination is negation. But what does that mean? You find this text [in] letter 50, letter 50, to a gentleman named [Jarig] Jelles [*Deleuze spells it*], and Spinoza explains this very well. This is the contour of shapes, explicitly. He says, "the contour determines the shape," okay. Okay, the contour is the determination of the figure. But at the same time, the contour, he tells us, is what the shape is not because the shape designates the place where the shape is no longer. So, the contour is indeed determination, but it is a negative determination; all determination is a negation. It is about the contour-limit that, explicitly, Spinoza offers an expression that will be celebrated.

In other words, I can already conclude from this, if I am honest, by reading this text, that a problem remains: if there is a determination which is not a contour, is that one also a negation? If Spinoza doesn't want to call it determination, what will he call it? Okay, so there is a problem. So, when he tells us that, Spinoza tells us, all right, shapes are beings of reason, that is, shapes are abstracts. A shape is an abstraction, and he makes his great criticism of the geometric shape. And yet, he employs a geometric method. It's weird! Few authors have gone as far as he did in criticizing geometric shape, and yet he employs a geometric method. What is happening? In geometry, would there be anything other than shape and contour? Yes, Spinoza tells us, there is something else. As long as I consider shape and contour, I am within a pure and simple abstraction. And, he tells us, nothing in nature is created through shape and contour, exactly as I told you earlier, nothing is created by molding. He says, we've never seen, we've never seen a circle be created in nature geometrically. There are many things that become round, and that's what's interesting. They become round, but they do not become round with a compass.

So, what else is there? It is therefore a critique of any conception of the abstract idea. He tells us, well here, consider, there are two definitions of the circle. He invites us to ponder fully the difference between these two definitions. The definition of the circle is the locus of the points situated equidistant from the same point called the center. Immediately, you see, I define the circle by its contour; the locus of the points situated at equal distance from the same point called center, this is what I would call a circular contour. The shape is defined, the shape of the circle is defined by its contour. He told us, there is nothing to be gained from this definition, and when the surveyors derive something from a definition of the circle, it's because they have given the circle, implicitly or not, another definition. What is this other definition? It is a produced shape, a produced shape, in other words, it's a definition by the reason of production, or what is called in geometry a "genetic definition". Think of the seed for the Stoics. The seed must be subject to a genetic definition.

The circle also must be subject to a genetic definition. We will define the circle as the shape produced by a line segment rotating around one of its extremities. In this way, you generate a circle, and it does not matter that nature does not generate circles in this way because at least you

have linked the circle to a power of action which, in this case, is not that of nature but the power of action of your mind. You can produce a circle with this definition, while the other definition gives you no way to produce a circle, that is, how to maintain the locus, the locus common to the points. Only the other definition gives you a means of production, a rule for production. So, it gives you a genetic reason for the circle. This is a genetic definition. You will say that the circle has a power of action. The circle is no longer defined by a shape. It is defined as a power of action. The genetic rule is the power of action to produce a circle, and the circle will go where that power of action goes. The circle will be defined by an internal power of action, no longer by an external contour. At that point, and under this condition, the geometric method can tell us something real.

Well, then, I reconnect with what I just said: the paradoxical notion of differential relations,  $dy/dx$  equals  $0/0$ , gave us the idea no longer in the sense of contour, but in the sense of what tends towards  $x$  and  $y$  when they disappear.  $0/0$  is not at all equal to zero because, in fact, it defines the limit towards which  $x$  and  $y$  tend when  $x$  becomes  $dx$  and  $y$  becomes  $dy$ , that is, when  $x$  and  $y$  become smaller, getting smaller than any assignable quantity. This is exactly the relation, at the level of the senses. This is exactly the forest-edge relation; this is exactly the light-spatialization relation. [Pause]

So, it is in this perspective that we find a confirmation of a kind of, in the 17th century, of return -- I am not at all saying that it was the same with the Alexandrians, with the Neo-Platonists -- but a return of an attempt for a pure optical space, a kind of thing with light, but there, precisely, light and power of action are so identified all the way to where something's power of action reaches, all the way to where something's light reaches.

Good, at that point, you see that infinitesimal analysis as interpreted by the 17th century, once again, I would say, it should not even be privileged. That's why we don't care about knowing if, mathematically, it's entirely correct (*au point*) because the question makes no sense. The interpretation they give of infinitesimal analysis, this is to mathematics what the painting of the 17th [century] is to the painting of light, where contour no longer acts, is no longer present as a tactile contour of the thing, even virtual as tactile contour, virtual in Rembrandt, for example, in the Dutch [painters]. This is a limit in a whole different sense when you talk about the limit of shadows and lights. Okay, this is a zone and not a contour at all; it's an art of zone. It tends towards a limit; so, there is a tension-limit which is opposed point by point to the contour-limit. This is the world of the 17th century.

[It] would then remain for me to say finally one last point. I only commented today on how the individual is a relation and what kind of relation. It was the relation-infinity link, and second, how [the individual] is power of action, and that was the other link, power- [limit; *Deleuze coughs while saying this word*], and the two are absolutely related. If I take my first group of notions, relations and infinity, and my second group of notions, power of action-limit, notice that they are absolutely linked since, once again, the limit is limit of the relation. So, you go from one to the other continuously.

Finally, I have a third point; it is by virtue of this [*group 1*] that mode is relation and not end (*terme*), by virtue of that [*group 2*] that mode is power of action and not contour, the individual

will be designated, in addition, intrinsic mode. Intrinsic mode, what does that mean? I would like you to think about it -- there, I am stopping -- I would like you to think about it from an example that, the next time, I will start with in order to comment on this notion of intrinsic mode. The author of this notion [is] a great theological philosopher whose name is Duns Scotus [*Deleuze spells it*]. A text by Duns Scotus says, here we are: "White light ... White light can be more or less intense, but more or less intense light does not mean more or less light. Light is light; only it is identically and similarly light, but it is so in many ways. These are the intrinsic modes of light." [*Pause*] Why do I want to start off from this text? Because there is a very curious text from Spinoza's youth in which Spinoza says: "If the wall is all white, what happens? If the wall is all white, what can we distinguish on it?" There are only two possible answers: either you can't distinguish anything, or you can distinguish something. Let's take the example, let's take the other case: the light is not only all white on the wall, but with charcoal, I've drawn a little guy, two little guys. I would say, the light is not only all white; I've added two drawings to it, I made two drawings on the wall; I distinguish one drawing from the other.

Let's not try to complicate it too much here; how do I distinguish them? By the contour. How would I call this distinction of the two drawings by the contour? I would say, it's an extrinsic distinction. One little guy is outside the other because, finally, if I have diabolically mixed the two men by hand, already I will have trouble: can I distinguish them? Can I not distinguish them? There we are. I have my two limit situations: my white wall, no drawings; my wall with two distinct little guys, extrinsic distinction. Can I introduce distinctions that would not be extrinsic onto the white wall? Fourth practical exercise, fifth... seventh practical exercise. So, we will go on from there next time. Here, I am stopping because we are all ill. [*End of the session*] [1: 58: 18]

## Notes

<sup>1</sup> In concert with the translation in *Spinoza: Practical Philosophy* by Robert Hurley, I have chosen to translate Deleuze's "rapport" as *relation*, since Deleuze is gradually developing an argument, from one lecture to the next, of the importance of differential relations in both philosophical and mathematical terms. Also, Deleuze employs the terms *puissance* that I translate as "power of action". With reference to Spinoza, this term stands in contrast to *pouvoir*, power.

<sup>2</sup> Deleuze discusses these "modal essences" in *Expressionism in Philosophy: Spinoza*, trans. Martin Joughin (New York: Zone, 1992), pp. 191-192.

<sup>3</sup> See the discussion of Nicholas of Cusa in the Spinoza lectures, 2 and 9 December 1981.

<sup>4</sup> This sequence of questions is Deleuze's way of trying to cajole the students to ask him some questions, using three verb tenses of the verb *devoir* – *dois-je recommencer? Devais-je recommencer? Devrais-je recommencer?* – followed by the strong *faut-il* (do I have to...) which he does not complete since someone asks a question.

<sup>5</sup> This reference to the thought experiment will become a running joke throughout this session since, in fact, there is no class held the following week. However, Deleuze's reaction here, "that's a shame," suggests that he really expected to receive more questions about the preceding point. This implication is confirmed in the following paragraph where Deleuze insists on going back over his first point before proceeding.

<sup>6</sup> See the discussion of the *Timaeus* in the Leibniz seminars in 10 and 17 March 1987.

<sup>7</sup> See the discussion of the tactile-optical in the Spinoza seminar on 27 January 1981.

<sup>8</sup> While I was not able to locate this title or any author corresponding to it, Deleuze has referred frequently to the important German art historian Wilhelm Wörringer, notably *Abstraction and Empathy* (1907).

<sup>9</sup> On Buffon and questions of modulation, see *Francis Bacon. The Logic of Sensation*, trans. Daniel W. Smith (London: Continuum, 2003), p. 192, note 20.

<sup>10</sup> The final Spinoza session, on 31 March 1981, will also be the introductory session for the seminar on Painting and the Question of Concepts, that continues to June.