## Gilles Deleuze

Seminar on Leibniz and the Baroque - Principles and Freedom

Lecture 20, 2 June 1987: Principles and Freedom (15) -- Course on Harmony, including Students' Interventions

Transcribed and translated by Charles J. Stivale (duration, 1:15:45)<sup>1</sup>

## Part 1

I have the feeling that some among you, judging only from all this equipment, are here for a final course. I would like to tell you something about final courses: final courses always happen, but not always at the moment that one thinks. Final courses have always already happened. The final course was the previous course or the time before that.

So, today's session is not at all a final course. Today, it's something completely different. And I had indicated to you that I was hoping that we would gather together, a certain number among you who have participated in this course this year or worked together, in order to initiate some new research directions as a function of what we have done this year. And on this topic, what I was expecting is for some of you who are particularly competent, in my view, to speak, and for me to say nothing at all. [Laughter] I will just ask questions. I've already done my final course. So this is how with these lights, I don't know where you're going to put them... [Deleuze refers to the film crew] I don't see very well... This will be a silent movie! [Laughter] So, this is perfect because I see that we agree entirely, but don't count on me for a final course with these lights... Final courses, you'll keep on missing them. A final course is not filmed because, I don't mean that it's nothing, but it has always happened yesterday,... or never.

Fine. So, what is this thematic reflection (*relance*) that I wanted all about? Some among you had graciously accepted the following principle: we have spent a year on this very strange, engaging author, Leibniz, and then this theme of harmony constantly was floating about, the harmony of souls between themselves, the harmony of souls and bodies, etc.; and then we noticed each time in passing that this is quite interesting because harmony, harmony – connecting harmony to the soul, we could create an entire history of philosophy from this. It's well known that from the side of Pythagoras, from Plato, harmony, the soul, are not without relations. But we would say, no, that's not it. We would say that there's something else: we would say that with Leibniz, it's nonetheless curious because harmony, we assumed, must be in the process of taking on a transformative sense (*sens tournant*). Immediately, something that has always been our method while working together, something reached out to invite us in: what reached out to us was music because, after all, in the same period, something was happening that especially resembled the unfolding of an entirely new notion of harmony.

Is it therefore the case once again that in one of the most creative of philosophies and in one of the most creative of musical movements something was not going to resonate, without copying each other or applying to each other? But when Leibniz sought to

liberate harmony from certain notions with which it had been confused up to then; and when musicians were going to discovery harmony by liberating it, let's say -I am speaking very grossly -I liberating it from certain attachments of counterpoint, aren't there things here important for us?

And [I am] also adding, before I can cease speaking, precisely that our method has deliberately been a bit monstrous. I mean – when I have spoken about this to some here on whom I particularly rely for their help, they gave a first reaction that was not entirely favorable – this was something monstrous there, at first glance, it was that this requires [us] henceforth to listen to some music. I would like you to understand, and you won't have any trouble because this has always been our method, and since we will be working together, you will be less surprised. But I dream of a reversal of a certain method; this is philosophy becoming illustrative of something else. I make no claim for pieces, for example, musical examples that would have us understand what occurs in harmony. I make a claim precisely for the opposite: there are, for example, in Leibniz some philosophical examples that will help you understand, perhaps, what occurs in music. Those who worked with me on cinema may recall that never did we use a cinematographic example. To the contrary, it was philosophy that needed to serve us as an example for concepts of cinema. It's this reversal of examples that appears important to me, and therefore we are going to speak about music without hearing a single musical piece.

On the other hand, those here who will derive something from this last... from this session, they'll go listen to some music, but I also believe they'll go listen to some Leibniz and will receive from Leibniz a certain musical understanding, and not only philosophical. I always am pleading for the necessity of a double reading of great philosophers who must be read philosophically, of course, if one can, but if you might not have the philosophical background to read a great philosopher, you always have perfectly the aesthetic culture, and there are musical readings, there are pictorial readings of great philosophers, or affective readings of great philosophers. It's not that you would lose nothing; you would then lose the purely conceptual aspect, but something very deep which is philosophy itself will remain. But there still is an affective reading of Spinoza that has always coexisted with a conceptual reading. There is a musical reading of Leibniz that coexists with his conceptual reading.

Hence my invitation to several of you because I was saying... Ok, I am really stating some extremely surface remarks and also extremely broad... Let's assume [that] this period [is] a period in which harmony changes its status, with what we call harmony tending to change and undergo a mutation. Let's assume that, for example, harmony is no longer defined by intervals, [Pause] but it's defined by accords. Harmony would be defined by accords. Then perhaps an entirely new manner of treating dissonances would be opened; [Pause] an entirely new domain of inner components of sound would be deepened. [Pause] The discovery of a certain tonality under the theme of tonal centers and centers of attraction would occur. A whole group appears here, harmony referring to accords, the organization of tonalities of center, or centers of attraction. Fine, it's on this first point that I have asked two of you who have worked with us this year to bring a little clarity to the topic, because the question for us is: does this new harmony, for example,

that refers to accords and no longer exactly to intervals, is this new harmony described as possessing a fundamental characteristic of Baroque music? Isn't this what Leibniz, in a different way, is undertaking? And when he speaks to us of the harmony of soul and body, he defines it through accords, which is something absolutely new philosophically, and no longer by what? No longer by intervals or by influences.

And when Leibniz tells us that he distinguishes three means of conceiving the relation of soul and body -- influence, assistance, and "assent" (consentement) – doesn't he circle around notions that are much more musical than we might have first believed? [Pause] [There is] influence, referring to melody for reasons that would require me to do a course, were I to feel more confident on the matter; [there is] assistance, referring to a certain type of counterpoint and to an evolution of counterpoint; and [there is] assent, appealing then to a new conception of the accord and of accords.

But finally, it's on this that I would like... I asked Pascale Criton and [Vincent] Valls [First name appears later in the session; however, the spelling of the last name may not be precise] to unravel this history in which Baroque music circulates around this mutation of harmony. And we would almost have to say... Well yes, you are speaking to philosophers, to people who don't know music, and you are going to help them grasp a musical concept.

Pascale Criton: Yes, should I ... [Inaudible]

Deleuze: Oh, of course, you can proceed as you wish, and if I have something to ask, I will, fine.

[Pascale Criton begins to speak]<sup>2</sup> [13:00-18:50]

Deleuze: Excuse me, can I ask a question? Just one question. What strikes me, if I understand well, you are in the process of telling us about the condition through which harmony is discovered and is defined through the accord, and not through the interval. [PC: Yes] It's first a new regime of voices. [PC: Yes] and not the reverse, is this right? [PC: No, that is...] This is what I would like for you to better indicate, that is, [Here starts the video of the session] there wouldn't be determinable harmony through the accord if we passed through the new regime of voices.<sup>3</sup>

PC: There were indeed accords; there was a notion of accord... It's a vertical accord that traversed the aggregate (*ensemble*) of voices.

Deleuze: That's it, yes.

PC: Whereas it's no longer... what regulated the aggregate of voices. So here, we pass into a phenomenon... It's small texts that are located in the Florentine Camerata, in Montiverdi, and the authors from the period, that greatly supported the singers' abilities. That is, these are singers who discovered this way of creating and invented with the composers... That is, a continuous, constant and deliberate encounter took place, a very close collaboration between poets, lyric poets like Petrarch... no, not Petrarch... Tasso...

finally, there were several, [Ottavio] Rinuccini, singers with composers. [Jump in film editing]

Deleuze: I need to say that your question is important to me because either we say – and this seems to be your opinion – either we say, well fine, there is a new regime of voices, and it's this regime of voices that made possible the new emergence, the emergence of a new harmony determinable as accord; [Pause] or one might say – which would suit me better, but if it's wrong, if it's not possible to say, well, too bad, it's not a problem – or what would suit me better is to say that, you understand, they were coming into an ageless turning point of Renaissance [Return to the film] already entering into a struggle or conflict of two possible directions that ordinarily we call, speaking vulgarly, the horizontal and the vertical. Melody is horizontal by nature, is called horizontal, and harmony with accords, the accords between sounds, implying a vertical control crossing over several horizontal lines.

And then, I jump over to a very different aspect. There is one thing, my horizontal pathway of melodic music, my vertical construction of accords; here eventually harmony will only be defined by the accord when the vertical line acquires, for various reasons, a kind of autonomy. Look then at the history of music – and I emphasize this is what I dare call history of music – which will pose the real problem, that there has always been in music, always the diagonals that existed as accords, like in painting, like everywhere... So all of that was very abstract. [*Jump in the film*]

But a second point: [Return to the film] so there was a great musical problem in general, putting into play the concept, specifically of horizontal melody and vertical harmony, and their diagonal combination. And there is a completely different problem: that music has always been an assemblage, a machinery, and creating music is arranging (machiner) voices and instruments, and instruments with voices, and that the instruments-voices machinery, the voices-instruments assemblage, has always had very, very important variations. And that... So here, I come back to Pascale's first topic. Yes, in counterpoint, voices and instruments are strictly – something that already represents developments of genius, understand? This isn't at all negative – are in a certain way interchangeable. What does interchangeable mean? Anyway, I am speaking quickly; you who know the material will correct me... I already notice your very severe gaze, and that bothers me a little. [Deleuze indicates Pascale Criton] Let's just assume...

And then, with the beginning of Baroque music, on the other hand, here I return, no, rather I refer to what Pascale just said [Deleuze speaks directly to Pascale Criton]. There are very strong differences in nature between voices, hence the importance of continuous bass, right? This whole history of bass and high notes, but there are going to be new relations between voices-instruments that will then engender a kind of machination between voices, and between voices and instruments that is entirely different [Pause] such that, so there we are, just my comment that... By causing harmony-accords rather to depend on the history of voices, couldn't one consider that is like having two sides?

Richard Pinhas: I have something to say... It's very important. Ok. While I emphasize that all Pascale said is absolutely correct, it seems to me there are... It's nonetheless

important; there's a kind of reversal that could be established, notably that the modification is notinternal to the musical machine, it's there secondarily, not that this would be less important, but just as important, but secondarily, reaching the level of voices, that is, it's after the fact that voices are going to be transformed. What happens with the passage from Classical music in that era and the passage to the Baroque, which is a revolutionary act and that is marked by very, very specific steps? I am trying to name them, principally Montiverdi, [Dieterich] Buxtehude and Bach, given that they are witnessing something that will be the "music of spheres" that arrives, that is, a music that is really going to be a music of pre-established harmony, universal harmony, demanded as such by the musicians, with the result that – this is yet another parenthesis within a parenthesis – there is a parallel and continuous development of music on the level of what is concerns harmony and what concerns philosophy, at the level of what is pre-established harmony in Leibniz.

So what is happening in Baroque music, once we say that this is going to link to a development of voices? But coming after the fact, there's first the establishment of consonances of basses that come effectively to replace the usual melodic counterpoints. We have a floating dominant on the level of tonality, that is, we have the initiation of a tonality that is going to pass from a floating to a fixed dominant. There will be a kind of modulation and continuous variation of tempo, as Pascale said, and there's a very important term in music, as we saw the last time with Rameau. I am thinking that it's a term that has very precise philosophical resonances: we shall see a majorized inflection. So, in general, these are the technical points coming to mark the sound machine itself.

And the most important point on the level of this change that is practically a revolution on the musical level that is fully undertaken starting with Montiverdi and that certainly has repercussions on the level of treatment of voices, but that is fundamentally a change in the musical machine itself, that is, we pass from intervals to a suite of accords. There is passage from a nearly pre-Baroque world, incarnated by philosophers like Jakob Böhme or [Marin] Marsenne, to something that is continuity, to a kind of infinite harmony, an infinite continuum incarnated [Deleuze is heard making growling noises] also by Bach in music, and by...

So I am finishing: what is very, very important is what happens to bass consonances, and bass consonances are going to become true referents. And what would be important for you to explain [he addresses Pascale Criton], because I think that you started to earlier, is this: these terms consonance and resonance, that are so important for a musician, they have, I think of their counterpart in philosophy and especially in Leibniz, and these consonances and resonances, that are going to give life to a whole series of harmonics, that are precisely going to be resonance and consonance of accords between each other that give birth to a new world, which is going to be the world of harmony, the world of the music of spheres, the world of pre-established harmony in music. And I think that if you defined a bit what in music is consonance and resonance, if you could manage to explain that, it would be really great, then, once we've said that... fine.

Deleuze: So I'm the one who messed everything up by placing... because now, this is getting complicated, at least for me, it's becoming even more interesting because, you

see, everything is happening as if we could say three things [Deleuze looks toward Pinhas]: Pascale was saying in her presentation, she was telling us: be very aware that something new emerges at the level of voices, and that it's this difference that explodes on the level of voices, that was not encompassed in the preceding music, in the music of the Renaissance. It's this difference that will make possible harmony by accord. I intervened then rather timidly by saying that it would suit me better – one can always try – it would suit me better if for the moment, we considered this as two independent variables. On the one hand, for reasons yet to be considered, and that Richard also has just suggested, harmony is defined by accord and not by... the... I cannot recall what... [Students provide an answer] ... by interval. And on the other hand, the voice-instruments machinery is not at all produced in the same way. [Jump in the film]

[The session continues with Pascale Criton speaking, her brief comments barely audible in the audio recordings; Deleuze listens while smoking a cigarette]

PC: ... the heritage of written music, of scholarly music. I am not saying ...

Deleuze: Yes.

PC: ... that instruments do not exist – it would be crazy to say that – but writing for instruments did not exist.

Deleuze: That's right!

PC: So, we cannot say that voice came afterwards. It's absolutely...

Deleuze: But we can consider that being a state of a machinery that introduces no difference.

PC: Yes, absolutely. There is an exchange. There is an exchange, but the exchange is nonetheless, during the entire beginning of the Baroque era, very important.

Deleuze: It's what you earlier called equality... It's what you yourself called equality.

PC: Yes, but it seems to me that it's very important to sense what happens at the start of Baroque music because there's a rupture: it's the rupture of a world. There is the writing of counterpoint by Buxtehude, for example, but a bit later. This is in Germany, and in Germany, Baroque came very, very late, and they conserved the writing of counterpoint, and they never let go of it...

Deleuze: Agreed. So there is no problem on this. But Richard's third position was: can't we still begin by defining the Baroque contribution of accords? Hence his request to recommence with a definition of consonances and resonances, I believe. [PC: Yes.] To begin by the problem of accords ...

RP: ... and harmonic resonances...

Deleuze: ... and harmonic resonances... yes?

PC: But dissonances are not harmonic at the start; they are melodic, they are expressive, and it's the fact that voices express things [*Pause*]... It's the fact of such an expressivity of voices that enables chromatics.

Deleuze: This is very interesting, you see, because here, I don't know if you are correct, but you have rejustified and are maintaining your primary point (*primat*), with a small difference: you maintain your primary point about voices which, in your view, to understand the problem, one has to start from voices. It's quite possible... [*PC tries to intervene*], but I want to emphasize...

PC: But instruments are employed to imitate voices in that period.

RP: Can I make a comment? It's that...

PC: All the instrumental notations are "col contare", [Deleuze: Yes!] as the voices [do], etc. All these imitations of...

Deleuze: Here you have a very specific historical argument...

RP: Only one thing, and it's not at all a negation in relation to what Pascale said, but rather a confirmation. It's that chromatics is, effectively, one of the fundamental components that's going to enter into the construction of Baroque music. And this kind of generalization in the more open chromatics in relation to what is going to developed subsequently, but it's very, very important because it's a kind of reversal in music. Besides, if we are speaking about a turned-back chromatics also in Montiverdi, it's a chromatics that is fully born with Montiverdi, that fully belongs to his style and is applied to music itself, and after the fact or at the same time, but it's by inference, and nearly by deference that it is going to be applied to voices. The only thing that shocks me a bit, finally, that bothers me a bit, is in saying that music did not preexist before the Baroque, and that everything is overdetermined by voices.

Deleuze: Let's leave that... Let's leave that, because what interests me is the difference of the two positions, but I feel already that there is no conflict. [*To Pascale*] You do support, in fact... It would be nice to know why you maintain this, because this interests me with reference to Leibniz, why you maintain this...

PC: Because in counterpoint, everything is dissonant – and again, I hope you understand me; I am dropping a lot for everyone's benefit – at the Renaissance period, they emphasized resonance, the principles of resonance that are the primary resonances of sound. And the principle, it isn't... it's governed... attention is paid, in fact, to voices being superposed while respecting resonance.

RP: Can you explain a bit what your [understanding of] resonance is because it's important for everyone.

PC: Yes, but what will interest us more is consonance, it's consonance. Resonance...

Deleuze: Yes, yes [Deleuze intervenes to reorient the discussion] Continue... I don't think you need to explain it. No, just continue... Consonance, resonance, I assume we will get there [after]... Continue by just using the terms...

PC: And in the writing of counterpoint that governs the unit of resonance, the dissonances are readied, that is, it's an entire game of writing of counterpoint. It's movement. Why aren't voices going to collide? Why are they always going to be able to leave some air, a space between each other?

Deleuze: This is a wonderful opening to say that. You are completely correct. And I don't need to make... This is a raw application. What must we retain about pre-established harmony in Leibniz? It's an opening of the famous "the best of possible worlds," it's a wonderful opening toward dissonances. It's the art of dissonance.

PC: There you are. Absolutely, and what I would like to add: is when I say voice, when I speak of counterpoint and I say voice, I am not necessarily saying singing voice. This is what's called ... We say voice in music, that is, the conduct of voices, whether they are instrumental or vocal. We call that "a voice." I would like to emphasize that each time "voice" is used, I don't mean "singing voice."

Deleuze: Of course, of course, of course ... I wanted... So here we are... I am reading from a classic book on Baroque music: "Whereas harmony by interval from the Renaissance only allowed perfect chords and sixth chords, other combinations being founded on delays (*retards*), the polarity between bass and soprano," and this supports what you are saying, "opens the door to new harmonic possibilities that, for conservative minds of the period, seems to be the start of chaos." That is, it's dissonances, it's the world of dissonances. So there we see a little something before you come back to... You, you, [*Deleuze speaks to Vincent Valls*] how do you grasp the questions in relation to the point we've reached? ... You can say something quite different from what has already been stated.

Vincent Valls: I agree fundamentally with Pascale. So I have very little to add. [Pause] I think that there is something fundamental, it's that music, Franco-Flemish polyphony is also above all a sacred music that refused expressivity, in my view, and it's this desire to cause the expression of feelings to enter into the music that is going to pass through the accompanied monody and use of chromatics of certain formulae. [Pause] I also think that there is a relation in the text and the voice...

Deleuze: [Pause] Right... Here you can ask... and perhaps the question is premature because I am not at all confident about what I'm saying, that's obvious. When you say, both of you, before... [Pause] There weren't any..., well I'm simplifying... There wasn't any expressivity, I would tend to think rather that the Baroque discovery of harmony had founded an entirely new expressivity, and that it's this new expressivity that was going to cause a scandal. Because, before, there certainly was an expressivity. Music was perfectly expressive, and it seems to me that it's confirmed by all those – let's call them this to make it easier – all those reactionaries at the time of Baroque music, all of them who

wanted to go backwards, and who had as principal theme "the Baroque, or discovery of accords, harmony through accords," [Interruption of the recordings] [40:23]

## Part 2

Deleuze: [... all of them who wanted to go backwards] tossed expressivity into the air. The true expressivity, was what? For them, it was inflection. It was melodic inflection, but it's presented as the sole expressivity. [Return to the recording] So, for example, I take an author who, musically, was in fact well behind in his era, Rousseau. His position against Baroque harmony, Rousseau's position against Baroque harmony, is eternally... But... You kill expressivity. Expressivity isn't dependent on accords. What they found fault in Baroque music especially was for much more, to have pretended – and this is what interests me as regards Leibniz – it's to have pretended to make expressivity depend on accords. And we indeed see what they mean. How do you have the expressive emerge from an accord of sounds? [Pause, then addressing Pascale Criton] That's not it?

PC: That's not it. It's the opposite.

RP: I would like just to add a small comment... Wait, just a small comment...<sup>5</sup> For the people [here] who are unfamiliar, it might be necessary to give them access to how people were listening to music at the start of the [twentieth] century, the *Pierrot lunaire* by Schoenberg. The inflection of the recitative, it's exactly what happens in Montiverdi's compositions.<sup>6</sup> What happens is that there's a kind of radical twisting that is inflicted, on one hand, to the text, and on the other hand, to the major melodic line and to the continuous lines. And there, in the same inflection in another register, it's exactly the same thing with the appearance of the major works by Schoenberg.

But the principal thing that I wanted to say [is] that, perhaps beyond what has been said about expressivity, on the harmonic change itself, although the problem of harmonic souls becomes preponderant, and I insist on this, the fact that there is a fixed dominant in the place of the floating dominant, I believe is a very, very important point. We return into a world with the Baroque music of simultaneity, and effectively we pass into a world of the vertical, that is, there is a complete shift of axis. And from this is a revolution is embodied, and in total resonance we link up to Leibniz's contribution because it seems to me that Leibniz's philosophy is the opening, the entry into a world of simultaneity.

Vincent Valls: What's also there... The fixed dominant assumes a unity of scale, and that comes later. The unified scale does not exist at the time of Montiverdi. You have to wait nearly a century, [Deleuze: Yes.] and that will vary according to the country. The unification of scale will develop much more quickly in Germany. Bach writes in an entirely unified scale, including minor tones, with the three minor tones eventually able to be superposed. Whereas at the same period in France, the minor mode still fluctuates more; it is not yet completely unified. But I would even tend to say that composers like Montiverdi are not seeking this unification because that allows them precisely so much to play on the ambiguity, to play on both levels (tableaux) ...

Deleuze: Of course.

Valls: ... and this is what can be heard quite well... there's a work that is, for me, relatively important, Montiverdi's *Orfeo*, because there we find this radical difference between the pastoral scenes that are not yet tonal, but we see what initiates a relation of scale, thus a tonic dominant relation that is opposed to all the recitative parts other works or *Orfeo* itself which are much more modal and are opposed. That allows them [composers] to play (on the levels) and to have, on one hand, a harmony derived from dance music that is pastoral music, and on the other hand, to have a kind of wandering that allows them to express and to oppose two sentiments.

Deleuze: In this, I follow you entirely, but in my view, we only have one problem in this regard. If you mean that such mutation occurs over long periods of time, this is true not only for music, but also for philosophy. That is, for example, we cannot say that, with Leibniz, there's only this that takes place. He is still playing... there are certain elements from Cartesianism that continue, and certain elements from the Renaissance that continue, and he plays with all that. And what you are saying about a musician, is also true for a philosopher, is also true for a painter. In my view that does not prevent there being what we can call "rigors of the concept," the concept not saying, "from this moment on, there's this", but the concept precisely enhancing the importance of seeds of innovation that are still at work in the former state, how they are going to precipitate, break loose, etc. Here we are... Of course, we must add that all the time markers that you state.

PC: However, this is important because the bipolarity of bass and melody remain; these are new relations. That is, there are forces, new forces that enter into play, and these forces, they are... little by little, the accords, whereas they were applied to support the instrumental or vocal play, they become functional little by little; they enter into this new rapport that is that of alternate form, opposed form, dialogue, responses from group to group, levels that communicate with one another. [Deleuze: Yes?] This is how little by little the accords have rapports of tension between themselves, rapports of force. So there is an essential rapport that is born which is the rapport of the fifth, [Deleuze: Yes!] that will be determinant for the construction of the system of consonances. The fifth is a... When a sound is made to resonate, there is therefore a series of harmonics, which is... The strongest harmonic is the one that returns most often, and which is the most determinant factor for the identity of sound.

Deleuze: But here, excuse me, but could you quickly just give me a general idea, for everyone, this list of accords?

PC: There is an accord in the sound, yes.

Deleuze: Dominant, tonic... what would the order be? ... Intertonals...

PC: What you need to understand is that the sound is an accord in itself. The sound is an accord. We construct scales by flattening (*couchant*) the accord that is in the resonance of the sound. [Deleuze: Good!] This is something that is simultaneous and flattened, and returned to the horizontal, and that gives points that constitute the tonal scale, the scale of

the tonic. And this is a relation of parentage that is created in a tension. And this tension is continued by the harmonic that is the fifth, that is the third harmonic.

Deleuze: So there is a tonic center already...

PC: Yes, there is a tonic center that is a point X, a point where we take a sound and say that this sound characterizes...

Deleuze: And then there are harmonics...

PC: That's it.

Deleuze: I have a tonic center and harmonics.

PC: But every sound...

Deleuze: What is it that gives me the dominant in this?

PC: The dominant is the fact that when we hear a sound, we don't assume that it came from nothing; one assumes that it comes from a resonant state and so that it proceeds from another sound. [Deleuze: Yeh?] A *do*, a *re*, a *mi*, it isn't given just like that, a priori. It's generated by something else.

Deleuze: Sub-dominant...

PC: Wait. No, no, no, that's not it. It's generated by the fact that, in a sound, the first harmonic is the harmonic that redoubles this sound; that is, we have a do, the harmonic, it's going to be the *do* from above, the other octave, which is in a rapport of identity. There is no alterity, that is, this do is going to have the same harmonics, and that won't open anything; there will be no generation. The first generation is the second important harmonic; it's the one that will return the most often, but in second importance, let's say, and that's going to be the fifth. Bum, baaa... [PC sings two sounds, then laughs] There you have a fifth, and it's the dominant, the dominant of all sound. It's the fifth, or dominant... How to express this? It's the expression of the first alterity of a sound; it's what is going to generate a cycle, what is going to open the sounds to one another. -- Is this ok? -- And this is important because it's here that there is a tension which results in the sounds not being juxtaposed measures, but having a dynamic rapport with one another, a rapport in which resonance is conceived as something extremely precise. One cannot just stroll around any which way. And the way in which the first accords of Baroque acted was not yet stressed (tendu), was not yet dynamic. And I believe there is – this is how I explain this; I believe that certain people feel this in music -- there's a link between the fact that there's a dramatic tension, an opening of tensions in music, in the pathetic, in the expression proper to Baroque resulting in our needing to find supports in sounds that are going to construct progressions of tension, progressions that are going to become more and more hierarchical, that are going to become functional in relation to one another.... Am I going too quickly?

Deleuze: Excuse me for coming back to my question right away: these discoveries

belong...

PC: ... to the Baroque, to the cycle of fifths.

Deleuze: To the analysis of the accord, of harmony by accord...

PC: Yes, but that all occurs slowly because, for example, Rameau has a...

Deleuze: Agreed, that happens very slowly under the conditions that Vincent has [explained]...

PC: And it's very connected to the needs of music, [Deleuze: Right] for expressing things.

Deleuze: Fine, but isn't this a path precisely in which you could create your explication independently of the problem of voices?

PC: Ehhhhh... [Pause for reflection] I don't know; no, not really.

Deleuze: Not really...

PC: All authors who have been determinant and have really established the norms...

Deleuze: Yes, that interests me.

PC: ... have begun by working with voices. The madrigal is really the form [*The very loud noise of a plane is heard*] that evolves most quickly and yields the most.

Deleuze: I understand.

PC: There is not one madrigalist who didn't create a madrigal yielding an innovation between the years...

Deleuze: But I can't say that these conditions... that this behavior of voices was a condition for this new organization of harmony by accords?

PC: Wait, can you repeat? The condition of voices was a condition of...

Deleuze: ... was a simple condition for the discovery of this harmony by accords and of determinations of this harmony by accords... [Jump in the film] One second [Deleuze resists being interrupted] My concern is always whether I can separate the two conceptual lines or can't separate them ... [Jump in film editing]

PC: Certainly, you can separate them; you can separate them, but... [The next comments by PC, approximately 90 seconds, are barely audible]

Deleuze: Yes, that would interest me all the more so since this would then be two lines: philosophically, this would be two different lines in Leibniz that would also converge and intersect...

PC: [Comments still inaudible, another 50 seconds, then return to the film track] Bach uses and reengages (relance) these voices by crossing with fifths all the diatonic degrees. [Deleuze: Yes, yes, yes, yes] There is this notion of cycle and this notion of graduation, of passing... of staging of levels.

Deleuze: Yes, yes, yes, yes, yes. I'd just like to make a point very, very quickly here. We realize that... Those who think about Leibniz here are already aware of a small amalgam, that when Leibniz speaks of the accord of souls between each other, we can say, fine, it's a way of speaking, sort of; there's the equivalent in Malebranche, in Descartes. There's the equivalent for lots of philosophers. And yet, maybe not, maybe not. Perhaps he already introduces a notion of accords that is not far from what was going on at that very moment, or that happened in music, and that the rapports between monads, such as we have seen them, you know... there's a principle, dominants, sub-dominants, little matter, but... All that is quite connected to something that is absolutely new to the extent that it's not as is said, a variant concerning the theories of the union of soul and body in Leibniz. It's not a variant; it's something entirely new and that is connected to a new conception of harmony, although he cannot invoke it for the reason stated by Vincent, because it's a conception of harmony that is being worked out, no doubt, in several domains. It's being worked out at once in astronomy, in physics, in mathem[atics]... [Pause] in music, in philosophy; it's being worked out over several decades.

And finally, we are making a bit of a step forward. Do you have something to add, Vincent?

Valls: Not for the moment.

Deleuze: Not for the moment. [Deleuze turns toward the blackboard, speaking to Richard Pinhas] And you'd like to...?

RP: No, it's just a drawing of a table of harmonies so that people might see... When a sound is emitted, fundamentally [Pinhas refers to a drawing he has made on the board[, there are the resonances that arrive through levels, exactly as Pascale explained, that we see in a projected manner. We are able to understand that it happens by the fifth, the third, the seventh, the ninth, etc., once we have stated that the table of harmonies begins through steps. Harmony is a fundamental partial of sound that comes... The terms are very important because the notion of harmony, which for us is fundamental in Leibniz, is fundamental also in music and notably at this period because there is simply, as you said earlier, Pascale, a zone of fusion that occurs between the vertical and the horizontal, and it's this zone of fusion in which Baroque will be born.

So the relation of consonances of accords is as if there were kinds of projections of virtuality. The resonances of the accord, the table of harmonics, are literally the virtualities. We are in a world in which temporality reigns – temporality isn't a good

word – but where simultaneity reigns. Simultaneity is represented first by the sound, and then by the accords, then by the succession of accords, not in their succession, but in their interpenetration, thus on a literally vertical axis. And underneath there will be fundamental sounds, underneath fundamental consonances; there will be a profusion and a proliferation of virtual consonances that are actualized according to the technical means and according to the composer's modes of realization (*effectuation*). And it's these virtualities that we rediscover in the domain of philosophy, and notably... I would say unconscious or nearly unconscious virtualities that are going to be actualized by the composer and that are going to form the new system of consonances. But that is the same as Pascale said...

Deleuze: We come back here... Perfect... Pascale and Vincent reached that point, it seems to me, at the question of consonances.

PC: ... It was concerning consonances, the bass lines instead of being attentive to the expressivity of instrumental or vocal melodic voices become constructive of a harmonic universe; that is, the rapport is reversed, that is, in the middle, or end of the Baroque...

Deleuze: Could you repeat...?

PC: ... the rapport ...

Deleuze: What is reversed?

PC: What's reversed is the bass becoming harmonic to such a particular point, that is... What we just spoke about, that is, what the accords contain becomes what is going... [Pause] what is going to organize a new counterpoint. That is, the counterpoint is resituated, returns, but it is organized in a level (plan) that is more and more architectural through this tension that is created, that has created an architecture, really a tonic architecture of points, of points of rapport and tensions inside vibrations of sounds. Let me explain. -- Is this ok? -- And so, for example, what we call the bass, then what is called modulating bass or ground bass (basses 'ostinato') is a bass that is going to emit all the points through which a music composition is going to evolve and that can even yield the general form of a composition, even a great one like the Passion, Bach's cantatas. It's not only the bass line, it's not only local; it is not going to have a local action, so that at the start of the Baroque, it has a very, very local action, advancing through points, through strokes (touches); it supports certain spots and the rest of the time, it waits, whereas there, fifty years later, it is no longer waiting at all.

Valls: ... is considered "harmonic rhythm"

Deleuze: That's it. Yes?

Pascale: There you are.

Valls: [Indistinct at the start] ... independent from the rhythm of voices in the direction of the line, and that can have its own rhythm that is equally independent of the rhythm of its bass, because through the play of reversal, there can be a same accord whereas the

rhythm of its bass has its own rhythm; there is going to be the rhythm of the harmony that is going to be established. [Deleuze: Yes, yes...]

PC: And this rhythm of harmony that is accelerated, that is rendered dense, I believe finally, we explain that it's in circumstances where dramatic action had to be more and more sustained – in the end, this is what musicians clarify – that the bass had to construct pathways, had to construct more and more precise, more and more complex functions. It's this that... There is nonetheless a rapport with voices that, during the entire start of the Baroque, I don't know, could not be obliterated. Then, this becomes instrumental because everything carries over into the forms of code of the concertant instrumental style that is truly the heir of the madrigal practices, of madrigals and of... It's difficult not to think of voices at the start of the Baroque.

Deleuze: Here you are coming back to... [PC smiles at Deleuze's reaction]

PC: And then, after we learn, we forget!

RP: Perhaps one can say... This is important. I believe, that the expression [is exemplary], that the voices, and it's quite important, are as if folded. This is the term used in music...

Deleuze: Folded voices, yes, that exists.

RP: They are folded onto the vertical axis; it's not a metaphor. And it's exactly what you said [to PC; while RP is speaking, Deleuze also speaks softly, inaudibly, to someone beside him] That is, voices are important, but they undergo a movement of torsion onto the vertical axis. That's the first thing. The second thing is important in the passage into the Baroque; it's just a passing remark: when you [to PC] said earlier that there was the harmonic frequency (cadenza harmonique) that arrives, and what does that mean? It's literally what we call, in modern terms, but somewhere that indeed corresponds also to Leibniz's philosophy, a placing into continuous variation of the tempo. This, this belongs – properly speaking – to the musical material (matériau) itself. The term "material" is a recent and relatively modern term, and that belongs to the sound matter.

Deleuze: It's Leibnizian. There's a continuity.

Pinhas: That's right. So, therefore, we have a reorganization of material that also passes through the harmonic frequency.

Deleuze: It's the continuous bass, it's the continuous bass, and there is the equivalent in Leibniz – I have no need to... these are points we've already presented -- it has a fundamental role, it has a fundamental role since there is even a law, it's a law of harmony, continuity... [Pause] Yes, very good... Yes... I am already satisfied, and so... What do you... [Deleuze turn toward Pinhas]

Pinhas: Perhaps Pascale could explain a bit to us what happens at the level of material in this change of the sound material itself, as for example, with the appearance of a certain kind of orchestration, for example. They realize that... Fine, let me just give an

indication: it's that there is going to be a very modern phenomenon like stereophony, that is, the bipolar distribution of instruments. So let me find an example: instead of there being an organ in the middle, or on the right, there will be an organ on the left and an organ on the right, and [there is] no writing created for that. It's the same for other instruments, so a whole pile of things connect to material. And Pascale is correct in insisting: it's the transformation of classical music at this period into Baroque music that occurs over a century, a century and a half, and it's the same in philosophy. I mean that this whole kind of mutation occurs over a fairly long period, and so writing takes form over many successive periods. And I think that you could perhaps say something about the organization of this material, once we say that it is fundamental, I think, in the development of this continuity, of this simultaneity that is being born. [Pause as PC considers RP's statement]

PC: From the start of concertant music, in the instrumental music of Venise, it's especially in Venise: first there's the Venetian school, then the school of Bologne, then the French school, then the German school. And all this [happens] over generations that succeed each other. And what is initiated is effectively groups of instruments that represent... It's tones (*timbres*); really it's groups of tones, and what is important is from the fact they are differentiated, there are string [instrument] groups that are opposed to wind instrument groups, each one with "continuo" – each one has its continuous bass – and it's a formal organization that is really the beginning of all... finally, it's the principle of variation, of variations in the orchestration. This is where instrumental music is born that yields the orchestra; it's the birth of the orchestra. [*Pause*] ... Not what you were looking for?

Deleuze: Oh, yes, that suits me perfectly; that suits me perfectly.

PC: You know, I tried to answer you on a stricter level ... well, on a rather strictly musical level because I think that it's up to you to make the connection with Leibniz.

Deleuze: But it's [about] that guy [Leibniz], and as for me, here, I'm not doing anything more! [Laughter, especially PC] I don't want to do anything more! I just would like to muse  $(r\hat{e}ve)$ , so let us muse together on this: we would have to work together for another year. Well, what would we have discussed in that case? We'd say, that's right, we're the ones who can, that's what we'll do, because strangely all this really seems perfect to me. It's not a question of applying complex musical notions to Leibniz. It's really a question of seeking in Leibniz in what way this idea -- on the one hand, an accord of souls, on the other hand, a kind of change of direction in which the accord of souls becomes an accord of souls with bodies – could only was occur at the same time that a system – a system named by Leibniz as pre-established harmony – [this idea] could only occur at the same time as music realized (*opérait*) in my opinion – which [is] why I insisted on it, that I always was trying to reintroduce the independence of two factors, eh? – [realized] two correlative moments that constituted Baroque music, and that is the discovery of harmony by accords with all the meaning that this revealed to us, that is, the internal components, obviously, the internal components of the resonant body, [Pause], and on the other hand, without this... the other strictly complementary aspect, a new organization (machination) of voices and instruments, or if you prefer then philosophically, a new organization of

souls and bodies. And what would this mean? What this would mean is it occurs to the extent that each follows its own laws that enter into accord with the other. If you will, it's the idea of an autonomy of two series that is going to found the correspondence or what Leibniz calls "assent" (*consentement*), and it's starting from all this... nearly, that Leibniz is provided absolutely with a sound (à faire rendre à Leibniz un sonore absolument).

RP: There's a final point that seems very important to me. [Deleuze: Yes?] It's in relation to recent musical notions that have a total resonance with Leibniz's philosophy. These are, on one hand, the synthesizer that is the monad expression, I mean, of a monad. I mean, literally, the monad synthesizer is the extant actualization of the world. And on the other hand, [there is] another term, an apparatus, that is, a technical machine called a harmonizer, and it's a very, very important apparatus. Why? Because it's an apparatus that has existed for about a decade now and that [Pierre] Boulez uses in his latest creations over the last four or five years. I would like to create a small schema to explain how this functions because it reveal the virtualities of the musical world that are already completely present in Baroque music and that shows how different worlds that are incarnated by these different virtualities that are consonances, these veritable pluralities, because its millions of harmonic souls that are in resonance and harmonies themselves. There is going to be a kind of ownership, actualization by certain authors, of certain harmonic partials (partielles), and this is going to create a technical world that is very, very... I don't have the exact term, but I would say modulated, right? Can I create a small drawing to show how this functions?

Deleuze: But, certainly, certainly.

RP: This is really called a harmonizer. So I will explain. [He goes to the board and draws a graph while speaking]

Deleuze: A simplified drawing because that's very complex.

RP: Starting from the moment a note is emitted, whatever it might be, or an accord, there is first going to be a temporal play on this accord, that is, this accord is deferred a fraction of a second. It is not graspable by the ear, that is, for a thousandth of a second. And a harmonizer generally works with two or more than two voices. So this isn't something dual. Starting from a unique accord that is already constituted from a plurality of notes and thus consonances, it will give birth to a plurality of voices. And this machine, that we can situate here, is going to process this accord in a way that causes chords preestablished to resonate by the composer and that can vary from one to the other. I will give two examples of this, but we could imagine many. So technically, this happens through a time lag that is not perceptible to the ear because it's a lag on the order of a hundredth or a thousandth of seconds, called a "delay" in English. And from this accord, I am going to be able to have, for example, here a fifth and there a third - it's the same for a note – so I can have consonances of consonances. And this world, which is world of possible virtualities, obviously a world of actualizable virtuality, is actualizable according to the desire... according to the laws of composition that the composer will have applied. So these are in themselves ghosts of sounds, but that are going to be able to be actualized at one moment or another in a way of coming to resonate between here and here [RP]

points to his drawing], on a plane that is virtual and that passes into actuality through the operation of the machine and the desires of the composer, or that is going to resonate with the bass accord or the bass consonances, or all three at the same time, in which we can imagine about ten or a hundred sounds that themselves are already complex, that resonate simultaneously in a kind of continuous world, the world of the composition and of the pre-established harmony. And this is how today we have a technical answer to the "great laws", in quotes, that had...

Deleuze: Into the game... Yes, because I was telling you one day, understand, that God made the world by playing, this is a very interesting idea that runs through all philosophy and that began very early on, but what's important is to know what the kind of game is. The idea could mean, and it's not the same idea as long as one hasn't stated what kind of game it is. We saw this all too briefly because, there again, we are in a review of another study, that we would have to study very, very closely what Leibniz presents as the "game of God" when he created the world, and what little we did see, it was extremely complex, that it was a kind of game that wasn't at all the same as Heraclitus's game or Mallarmé's game, and that it's a very, very special type of game. [Deleuze looks up at RP's drawing on the board] Here what is interesting is that the harmonizer's game is a type of game. I don't at all mean that's it's Leibniz's, but that is of the same family, completely of the same family.

Listen, I would like to end like this. What I would like to tell you is two things. Next week, as I already told you, but I insist on this because otherwise there will be lots of you – so listen closely — that may have some problems. Next Tuesday I will be back, but only to see the students of first, second and third cycles concerning their personal work and any problems they have or things for me to sign. So I will be available to them Tuesday. So don't forget this. On Tuesday, we will take care of all your problems for first, second and third cycle students. So, do this, come; otherwise, I said that you can call me if you couldn't make it, if you have an urgent problem. It's very important to sort out your administrative situation. So, we have a rendezvous next Tuesday around 10 am on this topic.

And then, the other thing is very simple. I find that this year, we have accomplished again a rich year, and I am saying, without undue flattery on your part, that this has been greatly thanks to you. And finally, I deeply thank those who intervened in our musical discussion. So, I am quite pleased that it has left us, as required, with some confused impressions. But I believe that, in any case for me, it gives me some new departure points for work that I would not have had without this session. So, there we are, thank you very much. [End of the recording] [1:15:18]

## **Notes**

<sup>&</sup>lt;sup>1</sup> In *Gilles Deleuze, Félix Guattari: Intersecting Lives* (Columbia University Press, 2011), François Dosse explains that in order to consider the theme of "harmony" (also the subject of chapter 9 in The Fold), Deleuze turns to several specialists in music, notably Pascale Criton and Vincent Valls, as well as Richard Pinhas, hence a seminar with more interventions from the participants than was usual.

There are three sources for the preparation of the transcription and translation: on one hand, the two usual audio recordings, one from Web Deleuze and the other from the BNF; and on the other hand, the sound track from a film produced by Marielle Burkhalter presenting most of the session. As the film omits the first twenty minutes of the session and consists essentially of the part including the invited presentations, it thus starts in mid-discussion between Deleuze and Pascale Criton. The two recordings each provide the entire session, on different machines, but each contain different gaps due to tape changes.

Unfortunately, the start of Pascale Criton's audio presentation is nearly inaudible (from 13:10 to 18:50). But when Deleuze intervenes with his first question, the end of her intervention is audible since it overlaps with the start of the video version of this session. However, despite the presence of a film team and their equipment (or perhaps due to this), the video is sometimes inexplicably edited, producing jumps and holes in the film and the sound-track. Thus, this final transcript evolved starting first with the Web Deleuze recording, then supplemented by the film's sound track (and visual cues), and finally with verification of the augmented transcript thanks to the BNF recording.

- <sup>2</sup> The content remains barely audible in the audio recordings due to the microphone placement and ambient noise in the room. She undertakes a succinct overview of the importance of bass and alto voices in the evolution of harmony and accords in the Baroque period.
- <sup>3</sup> Since some segments from the session have been edited in the film (hence, creating gaps in the sound track), the passages transcribed from the audio version are indicated in brackets.
- <sup>4</sup> Reference is perhaps to Manfred Bukofzer, Histoire de la musique baroque 1600-1750 (1982), cf. *The Fold* (Columbia University Press, 1993), note 33, p. 163; *Le Pli* (Minuit, 1988), note 32, p. 185.
- <sup>5</sup> Deleuze here seems to want to continue his discussion with Pascale Criton, without interruption.
- <sup>6</sup> With Pinhas continuing to speak, Deleuze takes a resigned expression.