

## Extract: 24h Boulez

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In some ways this sound piece derives from an image in a book called *The Fold: Leibniz and the Baroque* by the French philosopher Gilles Deleuze. In this book, Deleuze describes the Baroque world as being not quite modern, but on the verge of modernity, and he sees a crucial expression of such Baroque world in the philosopher Leibniz and his concept of *the monad*. Now, the monad, to Leibniz, is the most singular unit that compose the universe, its most minute bodies or particles. When everything else is broken down into its tiniest detail, the monad is what appears.

Each of these singular bodies, or monads, expresses the entirety of the universe. They incorporate, virtually, an infinity of possible worlds, but they express clearly and distinctly, only the best of all possibilities, the best of all possible worlds.

This notion of the best of all possible worlds is precisely what makes these minute, singular units congeal into a functioning universe. To Leibniz, they do not congeal because of the affect one body has on another. There are no relationships of cause and effect. The monads do not relate to one another in a causal fashion. Instead Leibniz sees them as singular and autonomous, each of them expressing the world in a precise and singular fashion. What makes them congeal, come together into a whole, then, is precisely the notion that they all express distinctly only the best of all possible worlds, that is, they all express a part of an overall whole, an overall totality. This totality could be called harmony. It is harmony that constitutes the ground that makes these singular, tiny, units of being, congeal into one coherent harmonious universe.

Let me give you a quote from Leibniz' book *Of Monadology*, a beautiful image, that well illustrates the point I'm trying to make here:

*Hence it can be seen that in the smallest portion of matter there is a world of creatures, living beings, animals, entelechies, and souls.*

*Thus every portion of matter can be conceived as a garden full of plants or as a pond full of fish. But every branch of the plant, every limb of the animal, every drop of its humors, is again such garden or such a pond.*

*And though the soil and the air in the intervals between the plants of the garden is not a plant, nor the water between the fishes a fish, these intervals still contain plants and fish. But these living beings more frequently are so minute that they remain imperceptible to us.*

*Thus there is nothing uncultured, sterile or dead in the universe, no chaos, no disorder, though this may be what appears. It would be about the same with a pond seen from a distance: you would perceive a confused movement, a squirming of fishes, if I may say so, without discerning a single fish.*<sup>1</sup>

Now, to Deleuze, this notion of singular monads existing in an harmonic relationship without actually relating to one another is evident in all aspects of Baroque culture: architecture, fashion, the visual arts, but first and foremost, perhaps, in Baroque music. Here we find autonomous melodic lines that function singularly, on their own, as melodies, in the same way as the monad exist autonomously and singularly, but that are put together in counterpoints where they play up against one another in movements that are governed by harmonic relations into which any dissonance that may occur always dissolves.

A good example of this, I think, is Bach's *French Suites*. I'd like to play one of these piano pieces for you. This is a performance by the British pianist David Fray.

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<sup>1</sup> G. W. Leibniz, *Monadology and Other Philosophical Essays* (Indianapolis: Bobbs-Merrill, 1965), p. 159.

[ Extract 1 ]

As I'm sure you can hear, this piece comprises melodic lines that play against each other – no chords, etc. - only melodic lines that function on their own, but that are tied together in a contrapuntal play that always finds its resolution in an harmonic relation.

To Deleuze, this would perhaps be an ideal image of the Baroque world. However, in the last chapter of his book, he addresses the shift between the Baroque world and modernity, the point where the Baroque world found its perpetual crisis, and this is the image I found so striking and that worked as a foundation, of sorts, for the audio piece that we will perform in a minute. This is how Deleuze defines the crisis of the Baroque world posed by an impending modernity: '*it could be said that in these conditions the monad, astraddle over several worlds, is kept half open as if by a pair of pliers*'.<sup>2</sup>

Monads plied open, astraddle over several worlds. It is as if the ground upon which the Baroque world rested experienced a crisis, as if that condition of totality was shaken, and the guarantee offered by the notion of the best of all possible worlds – the harmonious universe – was suddenly ruptured in a situation where multiple worlds are being expressed simultaneously: a universe of multiplicities, impure mixtures, atonal series. We are still, as Deleuze puts it, very much Baroque. It is still very much a Baroque world, in all its expressive potential, but what is being expressed is no longer lodged deep within a totality, such as harmony, but has been plied open and now involves irreducible differences, sustained dissonances, and irresolvable atonal series that refuse and displace all harmonic relations.

Sustained dissonance, irreducible difference, perpetual crises: this is the modern world, and it is not to be lamented. Something is freed up: an alchemical universe in which multiple worlds co-exist, a universe of impure mixtures and experiments whose direction is that of the unexpected and unknown, rather than the totality of all knowledge and the best of all worlds.

Sticking to the musical frame of reference, Deleuze ends his book by briefly talking about composers such as Karlheinz Stockhausen, Steve Reich and, significantly in this context, Pierre Boulez. I'd like to play a short piece by Pierre Boulez, to illustrate this point. This is also the composition from which the audio extract which I have reworked. It's his *Ninth Notation for Piano*.

[ Extract ]

Now, the last 17 seconds of this piece, as you could probably hear, consists of two notes, a natural B and a B flat, struck simultaneously, thrice, slowly, quietly, and in such a fashion that the two tones are allowed to resonate for a fairly long time, becoming almost inaudible, before they piano keys are struck again. This, to me, beautifully illustrates Deleuze's point – sustained dissonance, it's not dissolved in a harmonic relation, it is sustained, it resonates, it fades out, and it is repeated. But in Boulez' piece, when we hear it today, this is far from shocking, it has become almost imperceptible, a beautifully understated and subtle play with the crisis of Baroque harmony. These tones are monads, astraddle over several worlds, testifying to the possibility of a universe of impure mixtures, where differences are not repressed but allowed to play against one another.

This quality in Boulez piece is what I wanted to amplify in the sound piece we will perform shortly after the end of this presentation. I wanted to prolong the sense of a sustained dissonance, amplify its resonance, and explore the sensation of extreme durations of slowly shifting atonal clusters of notes. Premised on such notion, I turned the 17-second audio extract into 24 hours without changing the actual pitch of the audio; in other words, I slowed it down until it reached a duration of a full 24 hours. I then divided this very long audio file into 24 hour long sections, and analyzed the sound, including digital distortions, by turning it into a midi-file. I then ended up with 24 very long scores from which I extracted the most dominant tones. These tones were turned into 24 clusters, each of which corresponds to an hour-long performance. I used these clusters to produce the score of a 24-hour piece, which you can see here on the wall.

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<sup>2</sup> G. Deleuze, *The Fold: Leibniz and the Baroque* (Minneapolis: The University of Minnesota Press, 1993), p. 137.

Alongside the actual tonal clusters, I've incorporated a series of instructions for anyone wishing to perform the piece. The performers are deliberately given a large degree of freedom to improvise and experiment with the clusters, whilst the instructions serve to retain the qualities that remain integral to the piece: its play with long durations and the sense of a sustained dissonance.

Now, in a sense, what I've done, I realize now, is I've treated the original audio extract not so much as a piece of music as a sound in itself. It's kind of surprising, in a sense, because you don't think of a composition as a sound, maybe a complex series of sounds, but not as *a* sound in its own right. But of course it is, in a sense, precisely *a* sound. Stockhausen knew this well. I recently found a citation, which I found very inspiring, in his text *Four Criteria of Electronic Music*. I'd like to quickly just share this with you:

*Suppose you take a recording of a Beethoven symphony on tape and speed it up, but in such a way that you do not at the same time transpose the pitch. And you speed it up until it lasts just one second. Then you get a sound that has a particular colour or timbre, a particular shape or dynamic evolution, and an inner life which is what Beethoven has composed, highly compressed in time. And it is a very characteristic sound, compared let's say to a piece of Gagaku music from Japan is it were similarly compressed. On the other hand, if we were to take any given sound and stretch it out in time to such an extent that it lasted twenty minutes instead of one second, then what we have is a musical piece whose large scale form in time is the expansion of the micro-acoustic time-structure of the original sound.<sup>3</sup>*

Isn't this a striking quote? In many ways, all audio, including music, can, when it has been recorded at least, easily be treated as a sound; it can be compressed into a mere fraction of a second, it can be prolonged to several months, in either case, we're dealing with the nature of a particular sound, such as, for instance, the broken, plied open, monadic bodies we find in Boulez' piece. Here, each second of the piece whispers of a complex range of tones, relations and frequencies, multiple clusters of tones waiting to be brought out, in the same way as an entire symphony can be compressed into a second of sound that still retains a whisper of the entire symphony. Is there a better image of the monad than that of a Bach composition compressed to a second, a whole Baroque world captured in a second worth of sound? And, on the same note, is there a better image of the crisis of the Baroque, than a Boulez piece, extended infinitely, into weeks, months, years of sustained dissonance? The sound piece we will perform this evening is an experiment that derives from precisely those questions.

This is the first performance of the piece. We will play one hour, a combination of two scores (number 8 and number 19), one two laptops equipped with sine tone generators. In keeping with the instructions, we will then perform hour-long versions of the piece monthly, over the next 24 months.

Thanks for listening.

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<sup>3</sup> K. Stockhausen, *Stockhausen on Music: Lectures & Interviews* (London and New York: Marion Boyar, 1989), p. 91.