

GENERAL RESEARCH LINES
(2007)

The structure of the psychic unconscious

For many years, my goal has been to recreate in my music the flux of the psychic energy continuously at work in the unconscious and its underlying structure. Difficult to apprehend, this unconscious activity appears for example through some unintentional acts and words or in fantasies and dreams.

The unconscious is structured as a language
Jacques Lacan

In language, the minimal units are potentially likely to form an infinite amount of words, sentences, according to the location, the permutations, the choice of phonemes and monemes which operate in the thread of the discourse.

On the unconscious level, one finds this same constant change and this transfer of units within a both consistent and dynamic network. Unstable montages are developed, conglomerates form and dissolve according to the combinations and the divisions of elements borrowed to the past or daily life (a word, a gesture, a fragment of body or of an object). These elements (the signifiers) can be identified in speech or in a dream thanks to the *free association* psychoanalytical technique.

These impulses which come through, this flux which carries along heterogeneous psychic materials derived from different temporal periods of our personal history, generate multiple connections and form signifying constellations, polarities, arrangements whose architecture is specific for each individual.

The sensorial reality thus undergoes a distortion and makes way to an intimate and subjective reality where the body, time and space, are subject to transformations.

Desire is not in the subject, but the machine in desire
Gille Deleuze and Félix Guattari

Musical *desiring machines*

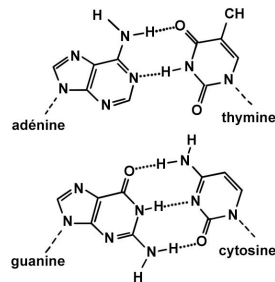
The musical writing aims to express this impalpable life of affects in its utter mobility, this "desiring machine" generative of constant associations and ever new arrangements, by elaborating sound configurations in constant transformation, a continuous disruption of the musical matter never permanently constituted and which perturbs the markers of the listening.

Under the influence of attractive and repulsive forces, minimal units meet (pitches, for example), form small oscillating entities and cross the sound space both on the horizontal and vertical levels. These mobiles move and are dilated or contracted through rhythmical processes. Moreover, various temporal layers are superimposed, and torsions and swinging movements of the mobiles around an axis allow their passages from one zone of pitches to another, inside a harmonic field, thus inducing its extension. The different areas of this potentially infinite field of sound particles are fleetingly set into vibration crossed through by these paradoxical sound objects, since the same energy makes them simultaneously appear and dissolve.

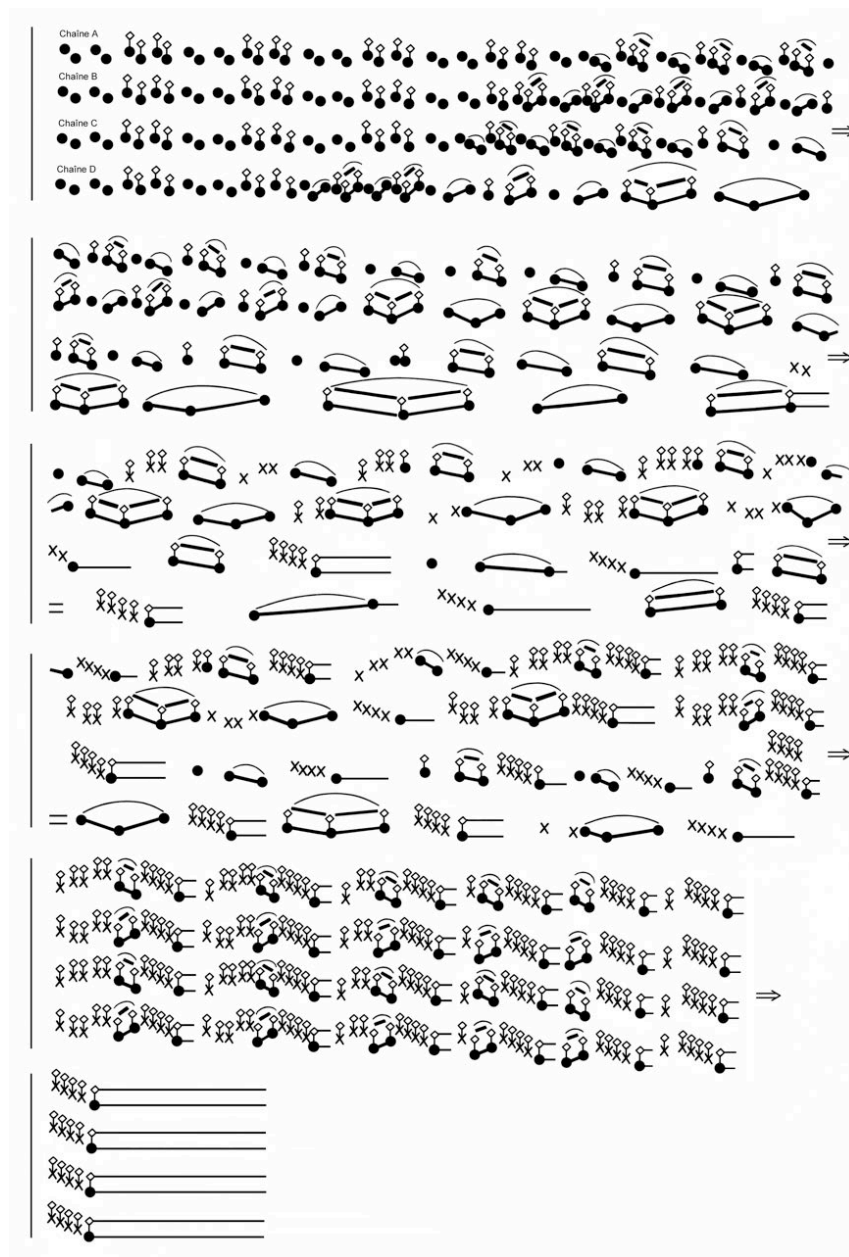
Genetics - The chain of nucleotides that constitute the double helix of the DNA

On the genetic level, one finds again this principle of linking the elements. The double helix of the DNA is formed of two chains of chemical components, rolled up in one another and hold by links between these constituents.

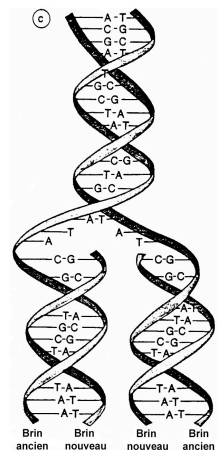
A link of the components which form the molecule of the DNA



Application to the musical writing - Varying links between the sound minimal units



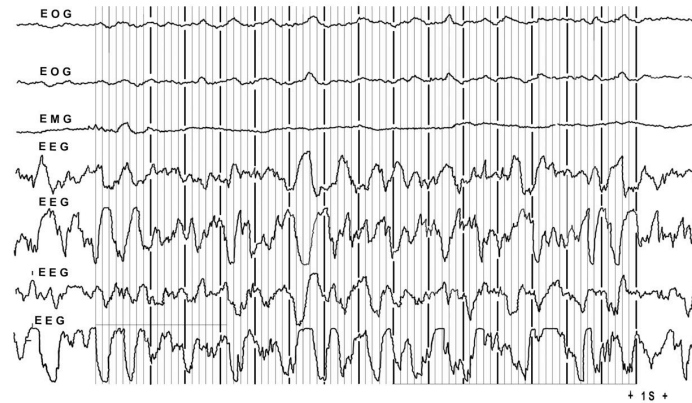
One of the strands of the DNA



The double helix of the DNA

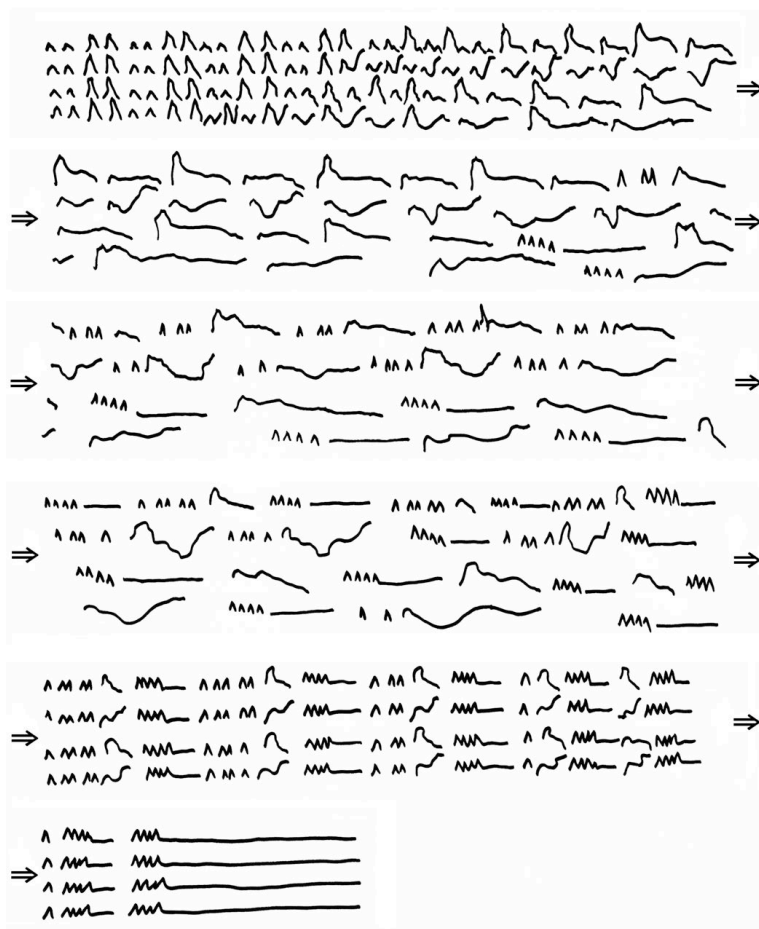
Excerpt from the process of a sequence of *Via rupta* for seven instruments and electronics
Diagram of the temporal layers and of the evolving articulation of the motives (here, four strings)
Refer to the score (bars 190 to 215) and to the CD (7'30 to 8'39)

Psychophysiology - Cerebral rhythms



Cerebral waves of the Stage IV of sleep

Musical application - "Musical waves"



The same excerpt of *Via rupta* for seven instruments and electronics
Outline of the motives ("musical waves")

All these modes have in common a same principle of linking minimal elements that generates an elasticity of matter, whether verbal, meaningful or chromosomal and cellular. These structural models are very rich in potentialities for the writing of a music articulated as the processes of the unconscious (the psychoanalytical aspect) or for a "musical genetics" (the physiological aspect). This variability can be observed in the electric activity, with its numerous oscillations of frequency and amplitude.

From these different scientific approaches, it becomes interesting to consider the musical matter as any matter, i.e. full of vibrations that can be imagined and transcribed as cerebral waves (a kind of "electromusicogram"), and made up of various connections (permutations, extensions, etc.) which form "sound molecules".

The libidinal or imaginary body

Beyond the individual psychic specificities, one always recognizes the abstraction of this other body which exceeds the carnal outlines and which is experienced as a whole set of sensations that substitute zones of intensity to the anatomic cartography. From this perspective, the body is pure tension condensed in one organ or another.

One of the main lines of my work concerns the writing of a sound body that would be the reflect of this unconscious image of the body, constituted during our childhood and sometimes in conflict with the limits of the real body image, since some regions can be overinvested or conversely experienced as missing in case of an affective trauma, for instance.

I find this dimension of the limit particularly interesting since it throws a light on most of Humankind's productions and behaviours. It can appear with a psychic experience of the body in dissonance with the perception of the real body, or with the awareness of the obvious weakness of our real body image confronted to the outside world.

On the musical level, the sound objects or the instrumental gestures gradually undergo torsions (the matter which constitutes them is dilated or contracted through various rhythmical processes) or variations of timbre (insertion of elements that gradually invade the original timbre). They will combine with other objects and thus create new objects in constant development. Identity becomes uncertain, changes of state and function occur. The objects can become a texture through a temporal stretching or a superimposition of layers with different temporalities. The choice of articulating some partials present in a sound spectrum can give birth to a musical gesture which, combined with other gestures, will make a new object appear. Some objects are gradually emptied of their harmonic content (the pitches disappear and give way to breath alone or to noise, for instance). They become transparent, disembodied. Only remains the outline of the object, emptied of its substance, as a dead envelope which could be transplanted to another object or another musical situation.

The body and the city

The urban development created by Humankind results from an attempt to extend the human body, to favour or increase its performances and its defences, but also to materialize the imaginary body. The constructions of all these body extensions that are the objects present in a city (trains, subway, airplanes, houses, etc.) compensate for the weaknesses, the deficiencies of the body. These are fantasmatic productions which long to deny the reality of the human condition which is that of the limit.

But do we invent the structures of these objects, these spaces or do they reflect ours and those which underlie the world, on a microscopic level (particles, cells) as well as on a more visible one (various and infinite forms that matter can take)?

And indeed, these structural phenomena can be equally identified in various fields of knowledge (genetics, psychophysiology, physics of the particles or molecular physics, for example) and in material edifications of the human being. One can therefore put into perspective the chain of nucleotides which constitutes the DNA and the chain of signifiers evoked by Lacanian psychoanalysis. The neuronal network of the brain can be related to the subway network. Lots of parallels can be envisaged if one favours the articulation of the elements rather more than their shape or their identity.

This is how I started to extend this relationship between the Psyche and musical structures to another meeting point between the Psyche and urban development, between the unconscious image of the body and the city, preferably focusing on its suburban places (with the possible metaphor of an unconscious of the city).

Towards a transgeneric music

The musical work is thus considered as a topology, a sound psychogeography.

It evokes this functional and structural complexity, this proliferation of events and connections, common to the Psyche and the city. It presents the same "rhizomic" articulation, the same cinematic characteristics.

The multiple trajectories, the series of links between the musical objects weave intertwined paths, crossroads, ramifications, junctions which draw abstract and fleeting cartographies.

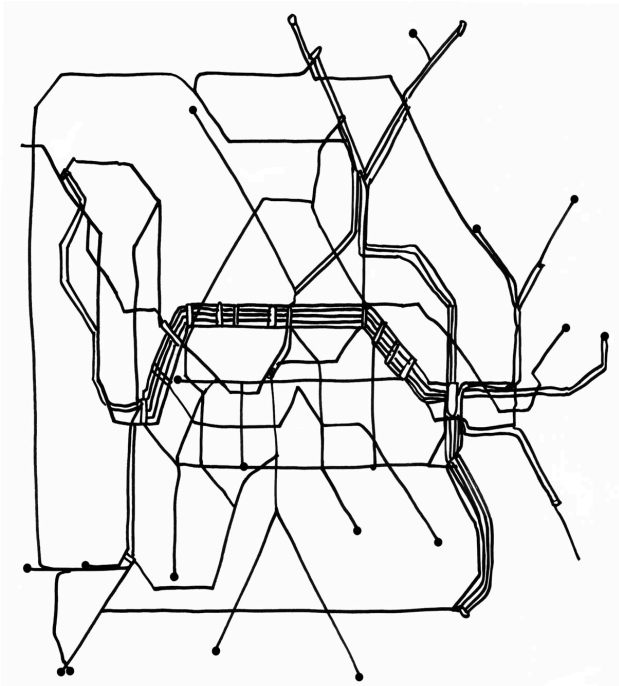
The musical matter thus suffers distortions, pulverizations similar to those that can alter the shape of the body in dreams, or those induced by the variable and random whole set of the city trajectories.

An urban body, an imaginary or a sound body? Urban space, mental space or the space of the composition? The musical work develops an architecture of fleetness and mobility. It is a space-fabric whose matter is flexible and with varying dimensions. Its form is a *becoming*, an endless process, a series of short materializations of the results of extremely fast and transgeneric sound paths.

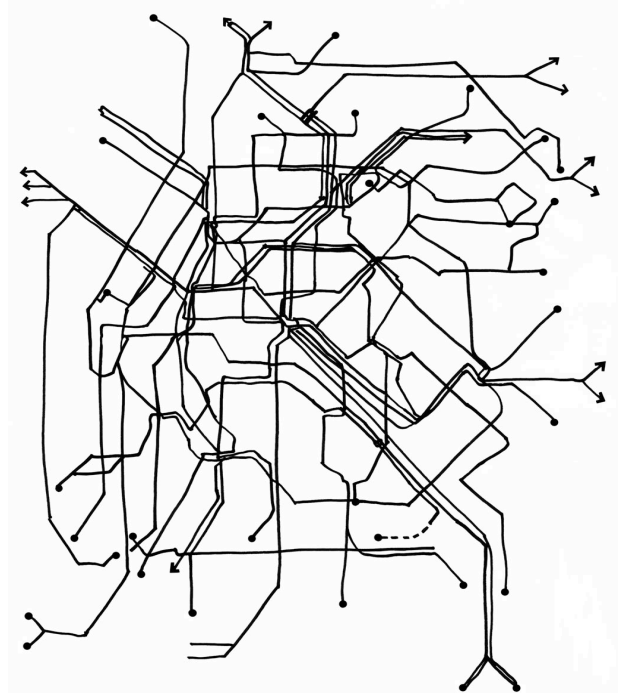
The use of electronics

The electronics allows many treatments (alteration of the identity of the timbres, endless division of sound, a merging of instrumental and electronic sounds, temporal stretching, modification of space, etc.) and a possibility of pushing the physical limits of sound even further. The recordings of noises, of instrumental sounds or of short sequences already composed undergo various transformations and thus build a group of deformed objects (as if they were heard through a prism), halos, quasi immaterial sound envelopes, echoes of the acoustic composed objects. New potentialities appear and contribute to opening a breach (revealing another psychosensorial field). The audience is at the heart of a space with indefinite outlines, the boundaries between the sound objects become blurred, their form becomes elastic or can endlessly recompose as in a kaleidoscope, their source is not clearly perceptible.

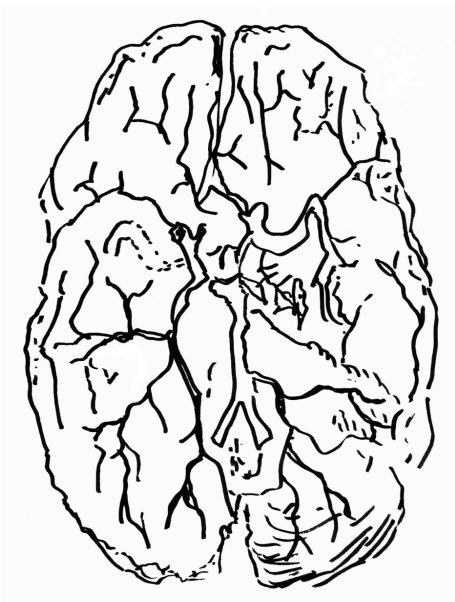
Possible transverse between the subway web-like structure and the structure of the cortical neurons Organisation of the fibres in the nervous system



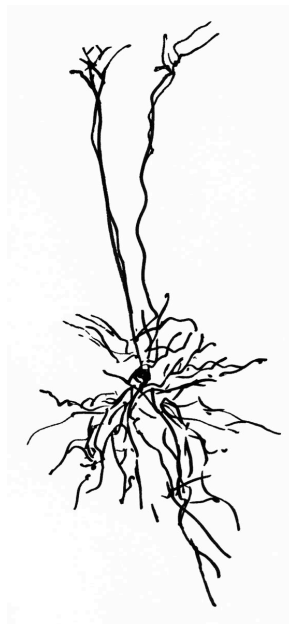
Map of the Berlin subway



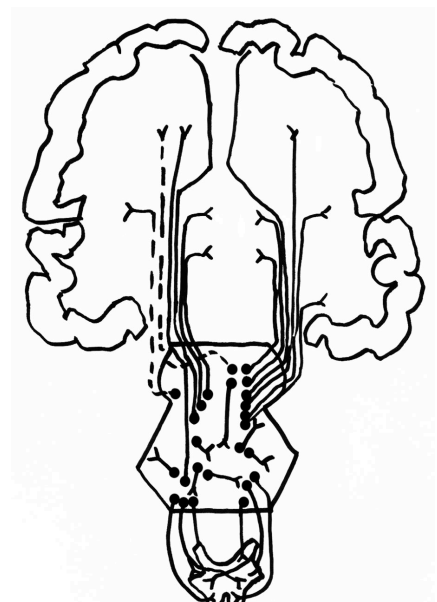
Map of the Paris subway



Section of the brain underlining the nervous fibres



Pyramidal neuron of the cerebral cortex and its nerve endings



Paths of the nervous fibres