

organ—machine—suguru goto

text assemblage
by Adrian Hornsby

In the vocal era the musician was his own instrument. Instruments brought in a new technical factor: mechanical possibilities increased, and dynamics and frequency ranges were expanded. This gave rise to new and larger-scale forms of expression, although the process of expression itself became more and more dissociated from human beings...Electronic music constitutes a third era within this scheme. It stands in the same relation to instrumental music as instrumental music to vocal music...There is no doubt that the subjective factor that dominated music for so long in the name of "emotional expression" is now close to extinction.

H. H. Stuckenschmidt, *Twentieth Century Music*

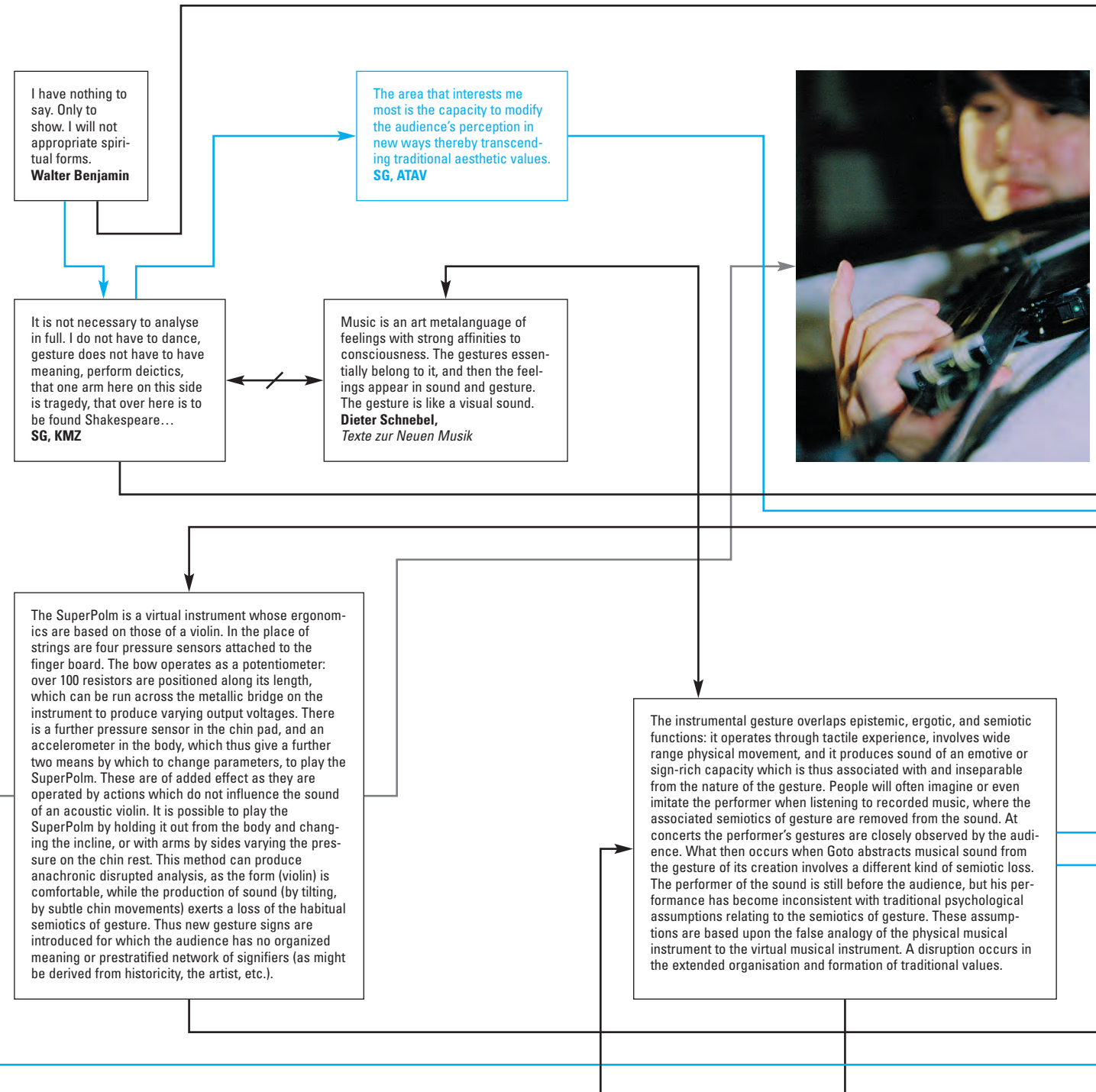
There are in fact two ways of reading a book: either we consider it a box which refers us to an inside, and in that case we look for the signified; if we are still more perverse or corrupted, we search for the signifier. And then we consider the following book as a box contained in the first one or containing it in turn. And we can comment, and interpret, and ask for explanations, we can write about the book and so on endlessly. Or the other way: we consider the book a small a-signifying machine; the only problem is "Does it work and how does it work? How does it work for you?" If it doesn't function, if nothing happens, take another book. This other way of reading is based on intensities: something happens or doesn't happen. There is nothing to explain, nothing to understand, nothing to interpret. It can be compared to an electrical connection, a body without organs...

Gilles Deleuze, 'I have nothing to admit'

Although technology does not invent new art forms by itself it offers musicians many new choices. In this sense artists no longer function as conveyers of traditional values and thoughts but as intermediaries who offer new values and perceptions based on their interactions with technology.

Suguru Goto, 'Aesthetic and Technological Aspects of Virtual Musical Instruments'

Suguru Goto makes and plays virtual instruments. A virtual musical instrument is a gestural interface which allows the mapping of movement to be converted into sound in real time. Inbetween the interface (a system of gesture sensors), which maps the movement, and the sound generated, is the computer. Information from the sensors can be fed through different algorithms in the computer to produce sounds in many ways, either assimilable to or divergent from the nature of the mapped gesture. One is not necessarily an unmodified expression of the other. For example, information from a single channel can be altered to become a rich and complex (eg. orchestral) sound, and deep textures can be triggered by very simple hand movements. Conversely high-energy gestures can be mapped and modified in such a way as to produce extremely gentle sounds. These changing levels of complexity of algorithmic transformation can be used to alter the perceptual experience of the audience. It is possible to use linear programming, in which case the audience can witness clearly the relationship between gesture and real time sound. It is also possible to create counterpoint, and have the algorithms produce responses opposite to those which might be expected from analogy to a physical musical instrument. Also it is possible to use very complex algorithms which make it impossible for the audience to follow what is occurring between the gestures made and the sounds generated.

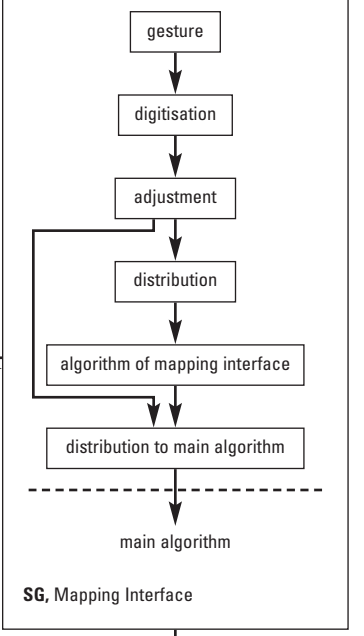


The SuperPalm allows for the creation of new gestures
 My experimentation concludes that these disciplines should
Drama and narrative are of no interest to me.
 because it can be assigned new functions via programming.
 exist in parallel and should have less of a relationship with
My focus is on perceptual experience—
 Since these body movements do not in themselves convey
 each other. Each field has no expression and no meaning,
I consider sound, image and gesture as neutral
 specific meaning, audience members observing the gestures
 and is neutral and plastic. Unexpected combinations and
elements that interact with and parallel
 would experience the resulting work in different ways. A
 results bring multiple meanings, but these are derived by
one another.
 "gesture", therefore, in the context of the SuperPalm,
 the public, not engendered by the artist.
SG, ATAV
 becomes an individual perceptual experience.
SG, ABRB
SG, ATAV

The compositions of Suguru Goto reject narrative and dramatic
 technique, and operate instead by a series of non-representational
 sections and transformations. Linear obstacles
 and routes are deterritorialized to form a horizontal process of
 intercrossing flows and lines and planes. Mapping produces
 parallel assemblages of sound textures, which are superimposed
 and shift through areas of heterophony and polytempo
 with varying intensities. The textures resist both universalising
 conceptualisation and totalising subjectivities in favour of
 abstract machinics, disjunctive figures, and proliferating
 series of texture. This does not indicate an absence of discipline,
 but rather a dedifferentiation, an area of infinite connections
 and spreading, of repetition and difference.

The sign that sets to work on its own account, that
 frees itself from the hypothesis of the signifier and
 which is coupled with a particle or a system of
 particles, i.e., the sign-particle as opposed to the
 sign-signifier.
GD, DMM

The Body without Organs is like an
 intensity which defines itself by axes
 and vectors, gradients and thresholds,
 dynamic tendencies and mutations of
 energy, cinematic movements with
 group displacements, migrations, and
 all this independent of accessory
 forms...
GD&FG, MP

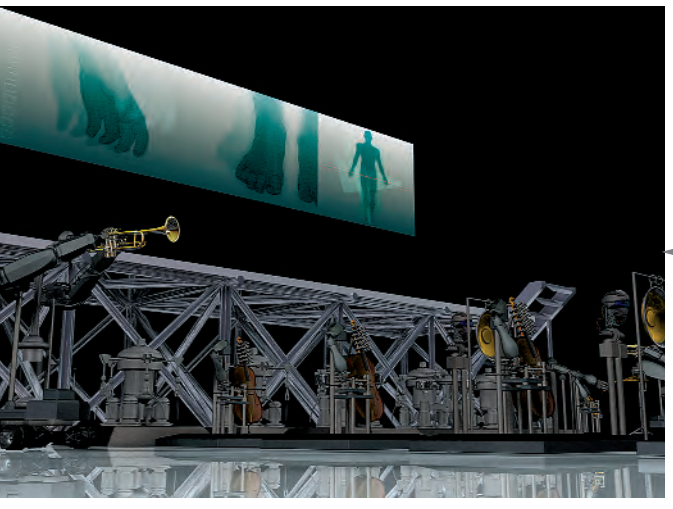


Guattari has just been talking about gestural
 music artists, then goes on—
FG: Here's another amazing work of composition,
 a record by Bonzo Goes to Washington entitled
 'Five Minutes', a CCC Club Mix.
Int: Oh, right, it's developed from Reagan's statement
 on the radio—
FG: That's it! Let's listen to this!
 [Song: in a slowed down recording, Ronald
 Reagan says in a bass voice: "My fellow
 Americans, I'm pleased to tell you today that I've
 signed legislation that would outlaw Russia forever.
 We begin bombing in five minutes." There
 follows a very rhythmic music dominated by
 drumbeat and bass guitar, on top of which the
 lyrics consist of the recurrence of various syllables
 of Reagan's statement, repeated in such a
 way as to create a 'song'. For example:
 "Bombing in five minutes, bombing in five minutes,
 I'm pleased to tell you today that, I'm
 pleased to tell you today that, to tell you today,
 to tell you today, to tell you today, to tell you today,
 Bombing in five minutes, five minutes..." This
 continues for about five minutes with different
 variations between rhythms and Reagan's words,
 sometimes accelerated, sometimes slowed
 down, always distorted.]
Interview with FG, 1985

The text that contents, fills, grants euphoria, the
 text that comes from culture and does not break
 with it, is linked to a comfortable practice of
 reading. Text of jouissance: the text that imposes
 a state of loss, the text that discomforts...unsettles
 the reader's historical, cultural, psychological
 assumptions, the consistency of his tastes,
 values, memories... Now the subject who keeps
 the two texts in his field, and in his hands the
 reins of pleasure and jouissance, is an
 anachronistic subject, for he simultaneously and
 contradictorily participates in the profound hedonism
 of all culture...and in the destruction of that culture.
Roland Barthes, The Pleasure of the Text

The idea of a totalising, indeed totalitarian,
 consciousness ('I am the master of my universe'),
 functions as a founding myth of
 capitalistic society.
FG, P/M

If the representation of coding codes too much on the signified
 description, the signifier will not carry an important coefficient
 of creativity. On the other hand, as soon as there
 is this arbitrarisation, and this creation of a spectrum that
 plays on its own register as an abstract machine, then there
 are possibilities of unheard-of connections...
FG, P/M



It's a whole axiomatics, down to the phonological level—the way of
 articulating certain words, the gestures that accompany them—and
 then the structures of organisation.
GD, CSVD

Capitalistic mechanisms of competition and powerful expansion are founded upon a universal instigation of circular desire-lack. The concept of desire is welded to lack in order to produce the motivating force by which economy is organised. That this lack achieves only temporary obliteration in the case of discharge (gain), and that desire-lack is perpetuated indefinitely (circularly), is principle to the structure of capitalism. The point at which a capitalist achieves jouissance, and so ends desire, is where competition system ceases to exist. This welding of desire to lack and its primacy in the capitalist mechanism can be witnessed in the nature and dissemination of media/advertising.

When you look at it, everything is manipulation. All identities are channelled through commercial manipulation.
SG, KMZ

One problem is that most artists use commercially produced computers—artists need to be aware that their creativity is always reliant on commercial considerations. Likewise we need to be selective with regard to the overwhelming mass of information surrounding us. Otherwise we will succumb to the totalitarianism of the media. If we are to retain a certain amount of individuality, we have to be aware of the manipulative processes of the media. Not many artists work in this way, which is why many artistic creations are banal and conformist.
SG, ATAV

Desire-lack is found at the level of the splitting of the subject, of the cut, the bar... In other words, it's through castration that you accede to desire... you will command all the more in so far as you accept castration and you pursue the impossible jouissance.
GD, DMM

Desire constitutes the very texture of society in its entirety, including its mechanisms of reproduction... Of course capitalism was and remains a formidable desiring machine.
GD, CVSD



The BodySuit is a Virtual Musical Instrument designed by Suguru Goto. It consists of a wetsuit with 12 bending sensors attached, one to each main joint: wrists, elbows, shoulders, ankles, knees, the root of both thighs. It enables motion capture for the entire body—data for algorithmic sound synthesis is created by the bending and stretching of joints, and thus gesture is transformed into sound textures. The BodySuit is now being used as the central data-source instrument for Goto's present project, Artificial Body Real Body. This consists of an orchestra of 25 robots which play traditional physical instruments (trumpet, cello, drums, etc.) according to the processed electric signals issuing from the BodySuit. The acoustic sounds they produce will be stratified with synthetic sound textures from a computer, also BodySuit-generated, and acoustic sound from human performers playing traditional physical musical instruments, and singing. Thus to the gestures of the BodySuit, a robot orchestra will play in varied juxtaposition with those gestures, the gestures and sounds of human performers around them, and the heterophony of the synthetic performance.

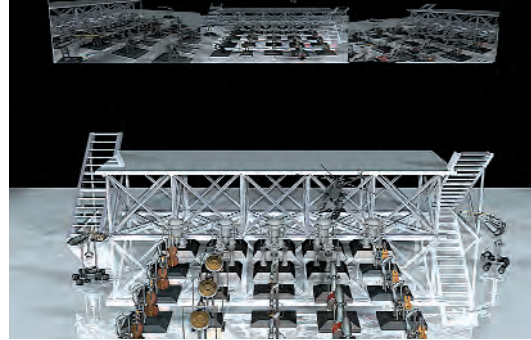
The robots will have the figure of a human body in partial construction—they are, in a sense, bodies without organs.
SG, KMZ Interview

We've become a bundle of loosened singularities, names, first names, nails, things, animals, minute events.
GD, 'I have nothing to admit'



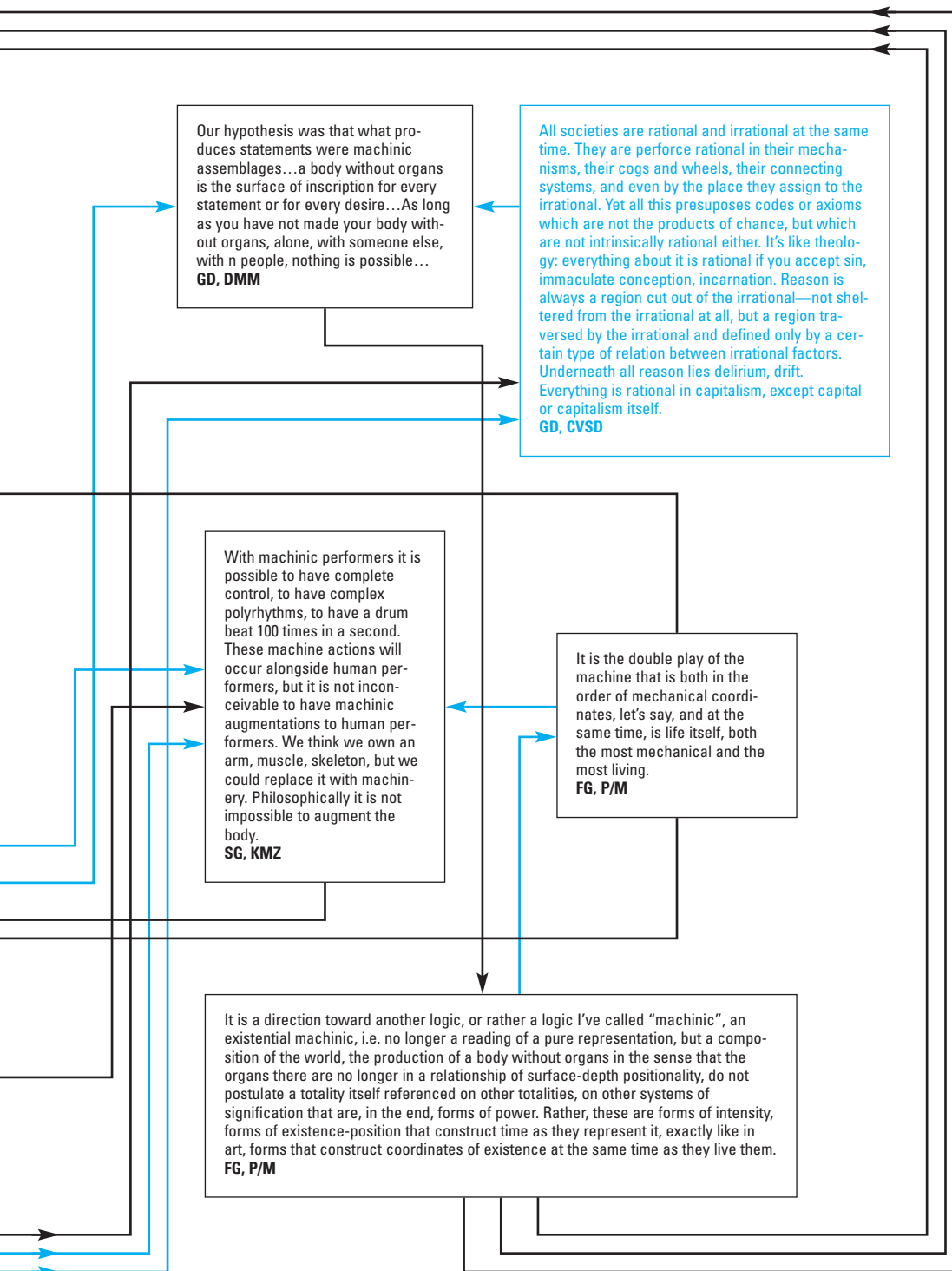
Everything is manipulation.
SG, KMZ

The possibilities for algorithmic variations allow both complex and simple relationships to occur between the gesture interface (BodySuit) and output commands (robot's playing of instrument). The important thing is that a single gesture of the performer in the BodySuit, such as bringing down an arm, will be responded to by many robots, for example all striking drums at the same time. Using a different algorithm signals can be sent with sequenced delay values to each robot, so the movement passes among them like a ball. Through algorithmic manipulation it is possible both to construct individual identities for the robots, and to manipulate the orchestral block as a whole.
SG, ABRB



The idea is to put human beings into a system where machines can act as an extensions of the body.
SG, ABRB

It is necessary to question identity. The body does not own identity, nor does stable identity exist within society: it is a question of situation and context. We think too much that we own identity. Each person believes in the possession of their own body, and identifies themselves within this border. When the border becomes ambiguous, as in the case of machinic augmentation of the body, the process of identification within the body becomes insecure. But once we have accepted the notion of the fragility of our identity, we need have no fear about the extension of our body. At present, our bodies are threatened by capitalism and globalization; our bodies are being manipulated, by corporations, for profit, and our identity threatened by overwhelming volumes of information and subsequent manipulations of that information. The identity possesses a shell called "the body," however, inside it is almost empty. The identity is something that has no meaning, and nothing to express.
SG, KMZ



Here there are no longer any forms or developments of forms, nor are there subjects or the formation of subjects. There is no structure, any more than there is genesis. There are only relations of movement and rest, speed and slowness between unformed elements... There are only haecceities, affects, subjectless individuations that constitute collective assemblages. Nothing develops, but things arrive late or early and form this or that assemblage, depending on their compositions of speed... It is necessarily a plane of immanence and univocity. We therefore call it the plane of nature, since on this plane there is no distinction between the natural and the artificial.

GD&FG, MP

- FG, P/M:** Felix Guattari, 'Pragmatic/Machinic' (1985)
GD, CSVD: Gilles Deleuze, 'Capitalism, A Very Special Delirium' (1995)
GD, DMM: Gilles Deleuze, 'Dualism, Monism and Multiplicities (Desire-Pleasure-Jouissance)' (1973)
GD&FG, MP: Gilles Deleuze & Felix Guattari, *Mille Plateaux* (1972)
SG, ABRB: Suguru Goto, *Artificial Body Real Body* (2002)
SG, ATAV: Suguru Goto, 'Aesthetic and Technological Aspects of Virtual Musical Instruments' (1999)
SG, KMZ: KMZ Interview with Suguru Goto (2002)