#### Ich werde hier sein im Sonnenschein und im Schatten

(I shall be here in the sunshine and in the shade)

# Preliminary conceptual notes toward 2008-2010 production research DAP-Lab - Brunel University - London

# First stage R & D

- Core team members develop concepts and content/material for five short modular performance or installation sequences (fashion-interaction-architecture).
- The modules are intended to explore and observe physical / tactile performance and gestural action/motion (enacted by a musician/percussionist, a dancer, an actor, an engineer, and a "control person" [non-performer] or model) and then connect the kinaesthetic/kinaesonic *ogypts* (experiments) with wearable/interfacial design on the following levels:
- 1. music/sound
- 2. light and garment materials (garment styling)
- 3. video/film textures
- 4. animation (utilizing motion capture data from the gestural action and cloth)
- 5. space/changing spatiality (frames / Cornellboxes / combines)
- 6. other variables devised by social science collaborators
- develop garment and costume concepts for interfacial design (Michèle)
- develop five sequences with distinct lighting design, coloration, mood, and communication system between the live and digital media and interactive elements
- the developed performance media worlds or immersive spaces need to meet artistic, scientific, technical and magical challenges.
- The five sequences become five small worlds that can stand on their feet and be shown together, in whatever combination. The work can be devised as a performance installation to be shown in different visual or music / design, digital art and dance or film festival contexts and in science & psychology/perception studies contexts

## "Ground" plan

The collaboration is set in motion, in the first phase, for laboratory tests (under observation) for (1) percussionist and (2) dancer, each invited to perform a short improvisation and then develop content material with the composer/choreographer/ designer. A duet is devised for percussionist and dancer/actor, and also can evolve into trio using object (mannequin, sculpture, worktool) on stage.

The "stage" space is created through light and reflective (plexiglass/mirror) corridors: Retro-engineering a new arrangements from several (crossing) runways/catwalks, with elevated, leaning panels (screens) in the backs/sides



At the same time as allusion is made to the fashion show, the space is meant to be open and distributed, multiperspectival, and also will reference the Japanese *hanamichi* / Kabuki stage <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> The kabuki stage features a projection called a **hanamichi** (literally, flower path), a walkway which extends into the audience and via which dramatic entrances and exits are made. Okuni also performed on a hanamichi stage with her entourage. This type of stage is very important in kabuki theatre. The stage is used not only as a walkway or path to get to and from the main stage, but important scenes are also played on the stage. Kabuki stages and theaters have steadily become more technologically sophisticated, and innovations including revolving stages and trap doors, introduced during the 18th century, added greatly to the staging of kabuki plays. A driving force has been the desire to make manifest one frequent theme of kabuki theater, that of the sudden, dramatic revelation or transformation. A number of stage tricks, including rapid appearances and disappearances of actors, have evolved using these innovations. The term *keren* (\_\_\_), often translated *playing to the gallery*, is sometimes used as a catch-all term for these tricks. Hanamichi and several innovations including revolving stage, *seri* and *chunori* have all contributed to sophisticating kabuki play, by which *hanamichi* creates the second dimensionality (depth) and both *seri* and *chunori* gains three dimensionality (height).







New York 2008 fashion show hanamichi

#### Kinasesonic space

It is suggested (Oded) that the musical material in this case is created through highly visceral / gestural performance of the percussionist, whose instruments (cymbals, drums, gong, marimba, bongas, tabla etc) can be distributed in space and need not be limited to one area. This allows the percussionist to move across the space. The gestural analysis (gesture performance will be motion captured in rehearsal; data used for animating visual images) is complemented by sound recording from source (microphones).

It is further suggested, that both the percussionist and the second performer will wear specially designed clothes (Michèle) which allow for projection of sound.

This means that we envision the performers to work with sonic amplification and dissemination, and the garments can be more sculptural and Kabuki-like (e.g. AudioGruppe audio-costumes), yet also abstract and built into a fantastic and abstract scenario of Klang-Farben-Räume (e.g. Kandinsky, Schlemmer, Fuller).

It is also envisioned that sculptural prototypes (objects) on stage might contain amplificatory matter (speakers) which can be moved or articulated by the performers. Eventually, this research can join with robotics /engineering to allow for autonomous creatures (AI) to interact with human performers.

The dancer can also be equipped with a wearable that may include amplification and sensors (motion sensoring).

#### The gestural song

The musical concept for the modules is based on the assumption that (unlike with other acoustic instruments) in percussive performance there is the most direct correlation between the power of gesture and the perceived outcome (what we hear) as well as power/emotional quality and resonance of the produced sound.



Sérgio Aluotto in Corpo, Carne e Espírito

#### the dance

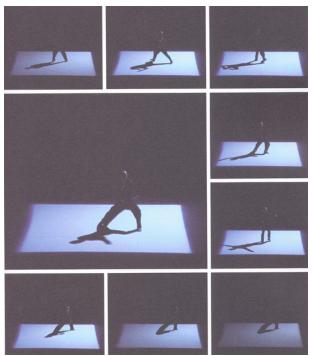
The five modules will have working titles and should aspire to have a length or 6-10 minutes. They can start out as micro-elements.

In the same sense of micro-tonality and micro-gesturality, the dancer might be equipped with one or two sensors and microphones, and will manipulate the visual outputs (projections) in the spatialisation of the performance; as an added lighting element, we shall attempt to use floor projection of both light and image.

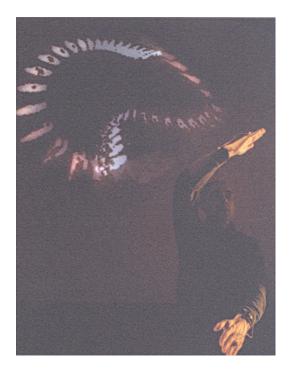


Myriam Gourfink in her work with sensors (*Contraindre*)

The performative and spatial relations between musician and dancer will be developed in rehearsal, along with the architectures of projection and the precise role of the interfacial designs for the wearables.



light-field-motion studies by Hiroaki Umeda in his piece Accumulated Layout



Thierry De Mey performing his composition *Light Music* [references taken from *Bains numériques* no. 2 (2008)]

#### Sketches

The first sketches for the production research will be completed in October 2008. In the autumn of 2008, the plans will be discussed with our VPE partners in Tokyo (Japan), and in the following year the teams from Tokyo and London will come together in a series of workshops in both locations as well as online.

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## Modules and new Collection

## UKIYO

(I shall be here in the sunshine and in the shade) (work title)

# 1. Brazhinsky's Rauchsprache

(Libretto for two actors, with projections, setting the tone)

## 2. Kruchonykh collider

(after Victory over the Sun, for those who know what the future will bring)

## 3. Riddled Color/Corps Lumière

To you, the people who have been born and are not yet dead

#### 4. Boson

On the burrowing underground motion of a hidden universe and its mass-less matter

#### 5. Dark matter

Microcosms of transduction between you and you or the two

# Motion Studies (Anarchaeology)

Research materials and some motifs for the performance/visual research

Comparison of ideas (on the economy of time): researching Aleksej Kapitanovich Gastev and his engineering experiments (early 20<sup>th</sup> century) as a flash back and critical entry into examination of 21<sup>st</sup> century effect of immersive virtual art and sur-veillance biotechnologies on the dis-integration of the private self/selfhood and dissolution of civil liberties (habeas corpus) on the one hand, and the "aesthetic" refinements of control systems, feedback systems and cybernetics on the other (from a point of view of an anthropological cybernetics and performatics).

# Ogypt: experience/experiment

"Machines are not objects to be controlled anymore, they are the subjects." (Gastev)

The study of the rhythms of a machine (and the perfected form of the automaton).

Packa orderov (A packet of orders), 01 - 10, like technical instructions. Written in short poetic form, to be recited in uniform batches... as if one were operating a machine (Gastev)

The listeners experience "a libretto of crucial processes" (Gastev)

**Motifs**: music, vibrating sounds, and their dynamism serve as metaphors for the process of transformation, and orchestration is a symbolic representation of the universe (universal).

06/10: slow down to zero.

Symphonies around the 7<sup>th</sup> parallel

Orchestra at the equator

. . .

Get ready. / Switch on./ Automatic operation./ Stop.

(the poetry can be considered part of the post revolutionary futurist movement in the young Soviet Union). It aroused suspicion, but was also hailed; some called Gastev "the Ovid of the miners and mineral workers"

Velimir **Khlebnikov**, one of the leading futurist writers in Russia, criticized its religious connotations but also praised Gastev's poetry, not the least because it accorded with his own prewar ideas: "This is a fragment of the conflagration of the workers in its purest essence; it is neither You nor He but the firm I of the great blaze of the workers' freedom. It is a factory siren, where one hand reaches up out of the flames to pluck the wreath from Pushkin's weary brow – its leaves of pig-iron melt in the fiery hand."

Khlebnikov also addressed a thorny problem, which had triggered much controversial discussion in the Proletarian Culture Group: he asked whether such poetry of daily industrial work experience could be written only by those who were themselves part of the technical production process. Besides having artistic ramifications, this question was also an existential one for, according to how it was answered, artists could be either included or excluded....



Fig. 2: The sound of machinism for a mass urban audience, 1922, the city as a gigantic music box, with conductor working on rooftop (above), a symphony created by Arsenij Awraamov.

Gastev's poetry was the outcome of his identification with technology, and the radical aesthetic of his "ten commandments" represented the culmination of a long developmental process rather than a revolutionary new departure. After the turn of the 20<sup>th</sup> century, particularly in the capital St Petersburg, a great number of painters, writers, musicians, and theatre people who had turned their backs on traditional art organized in fluctuating, loosely knit groups. When Marinetti, a leading Italian futurist, visited the city in 1914, the eccentric activists of the Russian futurist movement hailed him as a satiated, boring bourgeois. In the first decade of the new century, Khlebnikov began a rigorous analysis of language and constructed poetry based on mathematics and astronomical principles..... Around 1910, Alexei Elseevich Kruchonykh wrote poems with one-word lines. The composers Alexander Scriabin, Nicolai Roslavers, and Michail Matiushin explored music that invoked ecstatic states, ritual and ceremony. During World War I, the Polish writer, painter, photographer and art theorist Stanislav Ignacy Witkiewicz, also known as Witkacy, experimented with multiple exposures of figures on a single photographic plate. His Multiple Self-Portrait as an officer in the Russian army, for which he invented sophisticated arrangements of mirrors, was created between 1914 and 1917 in St Petersburg.

An important highlight of the combined artistic activities of the St Petersburg *Budetlyane* ("those who know what the future will bring") was the premiere of the opera *Victory over the Sun*, in December 1913. Khlebnikov wrote the prologue, addressed to "You, the people who have been born and are not yet dead," which ends with the exhortation: "the theatre is the mouth! / Spectators, be an organ of hearing (be all ears)/ And be observers." Matiushin composed the score and Kruchonykh the libretto. *Victory over the Sun's* first stage direction describes the opening act: "Tableau 1. White with black – walls white, floor black." The stage design was by Kasimir Malevich. Later, Malevich said that while he was working on the this opera, he painted the first version of his famous *Black Square*, which was exhibited publicly for the first time in 1915 together with many of his other suprematist paintings. The exhibition, entitled 0/10, was in fact the Russian cubofuturists' last.

Gastev's machinism was but one element in a complex constellation where artists in prerevolutionary Russia sought to communicate with each other and, at the same time, to position themselves in an international context. Machinism was not a unique phenomenon. The cubo-futurists fell voraciously upon the findings of the scientific and technological avant-garde and attempted to translate these into artistic praxis or to find autonomous forms for them in art (cf. Sergei Eisenstein: "Science has its ions, electrons, and neurons. So, art must have its attractions" [How I became a Film Director]).



Fig 6: Cinematographic study of a man working with hammer and chisel.

Khlebnikov had studied mathematics at the University of Kazan, where Nicolai Lobachevsky had taught in the early 19<sup>th</sup> century (co-fonding non-Euclidian geometry, and having published in 1819 his famous essay on a new "imaginary geometry"). The theory was further elaborated by Karl Friedrich Gauss in 1824 (an early protagonist in the development of telegraphy). Lobachevsky and Bolyai were the ones who delivered the mathematical proof, marking the beginning of exact calculation of the dynamic relations

of time and space, which radically changed the word views of mathematics and physics. These theories were not fully understood and developed until the end of the 19<sup>th</sup> century, and Khlebnikov and his fellows in the cubo-futurist scene saw Lobachevsky as a symbolic figure in the revolt against the old, static conditions of society....

20<sup>th</sup> century inventions of new instruments (and experiments in acoustics [Chladni's sound figures and Euphonium], calculating machines, statistical methods created to investigate the "comparison of ideas." Korsakov invented a machine that could classify logical operations (a formal intelligence device, represented by holes on punched cards, a process that had been invented a century earlier by the French mechanic Falcon for the weaving loom and subsequently refined by Joseph Marie Jacquard in his invention of weaving patterns on a fully automated loom. It is not until 50 years after Korsakov's paper that Hermann Hollerith, founder of the firm that gave birth to IBM, introduced punch cards for mechanical wrting (from Siegfried Zielinski: *Deep Time of the Media-Toward an Archaeolgy of Hearing and Seeing by Technical Means, Cambridge: MIT Press, 2006*, pp. 227-53).

# Photographs in this chapter:

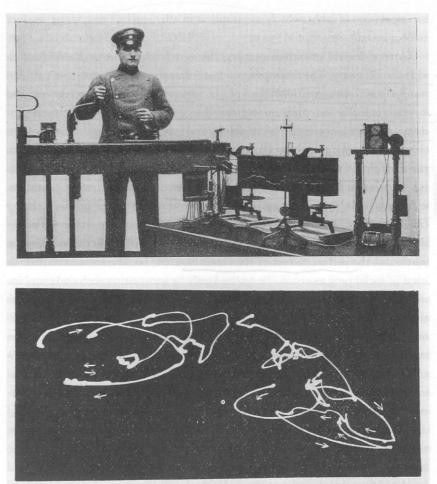


Fig 1: Dissecting the labor process in a Berlin Institute for time and motion studies: Experiment to measure the time taken for a tram's emergency stop. Times are stopped by 2 registering devices (top); the motions of the tram driver are recorded photographically as light trace (bottom).

Perhaps the most remarkable thing about Gastev's world of ideas is the rigor with which he attempted to translate his ideal of life as a functioning machine into a universal mechanism, from poetry into social reality. He was a passionate advocate of scientific-technical management, which had already been tested in Russia before World War I under the acronym NOT (Naucnaja organizacija trada) and had exerted enormous influence on culture, music and language. (Inspiration was drawn from the class enemy: Frederick Winslow Taylor. In 1881, Taylor had begun his spectacular studies and experiments on more effective use of labor-time in industry: Taylor's *Principles of Scientific Management*, 1911, with its central theme of "the necessity of transferring intelligence not only to machines but also to workers").

Gastev took Taylor's idea much further. From the rigorous application of technical principles to human activities he envisaged that perfect worker-machines would emerge as well as systems of experts at all levels, "directorate systems, administrator mechanisms, or works-manager regulators." From this, Gastev evolved the idea of a new "art of combining" (*kombinirovannoe iskusstvo*) for artistic praxis, which required an entirely new set of qualifications...



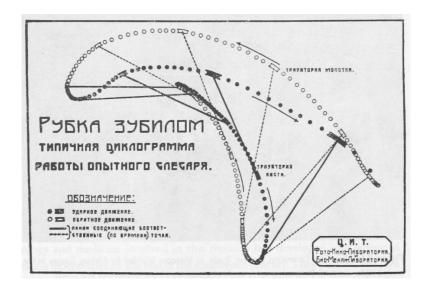
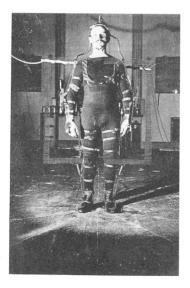
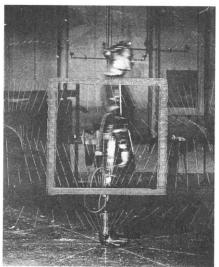


Fig. 7 Top: Strike and pressure: A demonstration of the chronocyclographic method on Gastev's Moscow Institute by a female worker with an artificial arm. Two photophorescent dots are fixed on the hammer so that the movements can be recorded photographically as curves. On the right side of the picture an assistant holds a measure to provide a scale. Bottom: Diagram of the movements of a worker wielding a hammer.





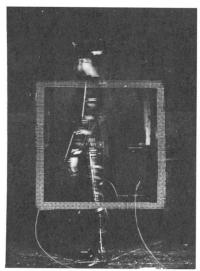


Fig.8 In the (photo)graphic representations of the cabled man the position of the limbs, head, and feet are clearly recognizable as discrete lines. Even the joints and principal positions for the movements, which particularly interested Braune and Fischer in the context of their binary code, are visible, as dots. At these points, the Geissler tubes were painted over with thick black paint, which appear in the photos as breaks in the white lines. Like Marey, the two researchers include the spatial and temporal parameters of the experiment in the photos: the lighter frame of dots, which is also visible in the frontal view of the male test person.

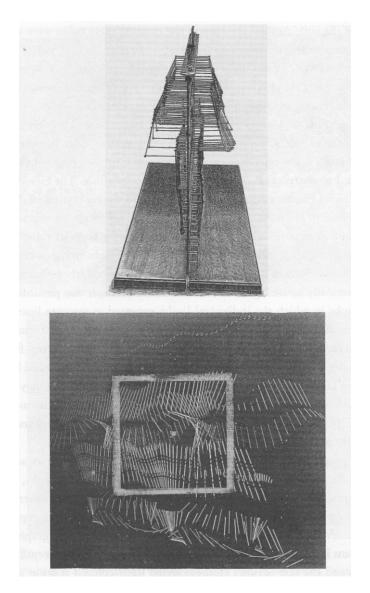


Fig.9 Braune and Fischer were not only interested in two-dimensional studies of human locomotion; they were well aware of its spatial dimension. From the graphic data of two views of the same movement (bottom), they constructed three-dimensional models of figures (top). To study bodies in locomotion (cf. Muybridge), one walked around these sculptures, built from physiological data. (Braune & Fischer, 1895)

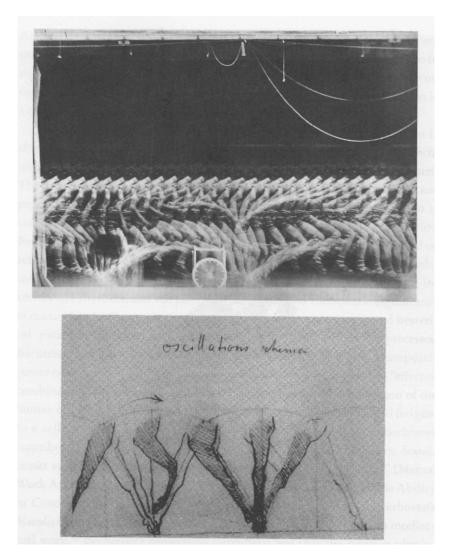


Fig.10 Top: *Etude de la course*, a single-plate exposure by Etienne Jules Marey (1886), captures the body of a runner moving through space and time. At the bottom, rather faint, is a measure in meters and in the center is the chronometer. The images of the runner look rather like pictures of a rotation that has been stretched horizontally. "It occurs to me that originally, photographic material belonged to the techniques of cabinet-making and precision-engineering: essentially, the devices were clocks for looking at things" (R. Barthes, 1985, *Camera Lucida*). Bottom: Parallel to Marey, the Hungarian artist Bertalan Székely studied movements, particularly of the horse. The physiologist Marey greatly admired Székely's precise and dynamic drawings and corresponded at length with the Hungarian artist, who is virtually unknown in the West.

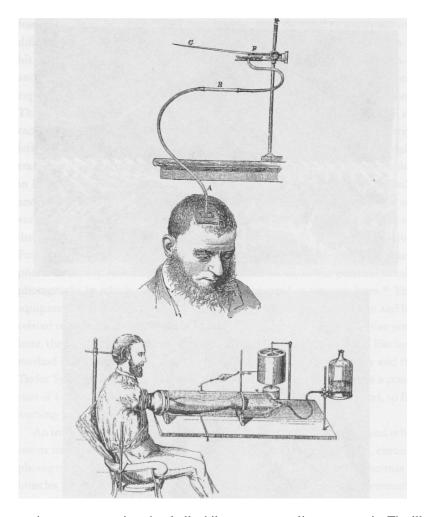


Fig. 11 Top: measuring pressure against the skull while a test person listens to music. The illustration originated at the Technical University of Kazan in the 1920s. Bottom: Apparatus for measuring the volume by which the arm expands when different kinds of music are heard. When blood pressure rises, the liquid in the chamber presses against the device connected to the needle of the recording instrument. The illustration is from a study by Tharkanov entitled "Effects of Music on Humans," which was published in 1898 in St Petersburg.

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These photographs are meant as sources of inspiration for the choreographic actions and measurements planned, but also for new wearable devices and garments and the overall composition strategy for an installation which could perhaps (now at the beginning of the 21<sup>st</sup> C and a century after the "tests" performed by Gastev and the other scientists) playfully and yet acutely probe the constellations of the "test" and "feedback" comparisons within scenarios that orchestrate a kind of "dictatorship of interactivity" or interactive consumption in the fashionable world of branding and art.