DANCE, BORROW, CREATE?
From the breath to ideas, from ideas to gestures

Yoga techniques, Kinetography Laban and computer music are major influences on my creative process. How do these disciplines affect my choreographic work?

FROM THE BREATH TO IDEAS

I have used breath as the basis of movement ever since my first solo Beith (1996), when I was inspired to research the internal necessity that produces movement. The breathing techniques in energy yoga (western yoga in the Tibetan Tilopa-Naropa-Marpa tradition) and the private research carried out by my teacher Gianna Dupont on the genital tract formed the basis of my experimentation. In practice it means “letting go”, thereby promoting work with balance as well as stimulating the deep muscles of the body. We work with the three diaphragms: pelvic, thoracic and cranial.

BRIEF DESCRIPTION OF TECHNIQUES

BREATHING TECHNIQUE:

We can distinguish between abdominal, thoracic and sub-clavicular breathing: we speak of three breathing stages or energy sources. Most breathing is carried out through the nostrils, often very gently and silently. The nasal turbinate bones are divided into three zones – the inferior, middle and superior turbinate bones – and these correspond to the three breathing stages. We also learn how to separate the right and left nostrils.

TECHNIQUES FOR CONTRACTING AND DISSOCIATING THE ZONES OF THE PELVIC, THORACIC AND CRANIAL DIAPHRAGMS:

- Sahajali mudra, for women, involves progressively contracting the lips of the genitalia, the vagina, then the neck of the uterus
- Vajroli mudra, for men, involves contracting the glans, the penis and the prostate region
- Aswini mudra involves successively contracting the two rings of muscle around the anus, working inwards
- Mula bandha involves contracting the perineum region located between the genitalia and the anus
- Uddiyana bandha involves gently drawing in the abdomen towards the spinal column, at the same time raising and opening the ribs
- Jalandhara bandha involves closing the thoracic opening at the base of the neck, the chin coming to rest gently on the throat
- Bandha traya is the simultaneous practice of the three preceding bandhas

Additionally, a technique called mula bandha “physique” involves contracting all of the perineum which is different from the more precise mula bandha contraction described above.

CONCENTRATION TECHNIQUE:

Concentration is focused on points, surfaces, volumes, lines and spirals, within the body space or in the space outside it; it circulates, connecting one space to the other, and it creates geometric shapes in movement.

Most of the concentration consists of mental effort and indriyas, i.e. the refinement and extension of our five basic senses. There are ten pairs of indriyas in total, each pair made up of the left and right sides of these basic senses: five of these pairs are indriyas of action, when an observer is observing the observed, and five are indriyas of information, going from the observed to the observer.
The breathing exercises taught by Gianna Dupont combine the location of the breath, the shifting of concentration and the introduction of mudras and bandhas.

APPLYING THESE TECHNIQUES IN MY CHOREOGRAPHIC WORK

These techniques share characteristics with improvised movement and naturally encouraged me to explore my own combinations of locating the breath and using mudras and bandhas, but above all they led me to use concentration to construct my own geometric shapes in movement. Guided by my breath, my sense of balance became extremely precise and I developed a very acute awareness of the space, as if I could sense every particle of air. My dancing became very slow, very deep and existed in a continuum of time.

The body is made lighter by the breath, which is extremely thin. I sense neither inhalation nor expiration. I smell the air that feels as if it is continually infiltrating the body, like a precious thread, through all the pores of the skin. I don’t really notice the contours of the body, as perception dissolves into the air, each cell extending and blending into it. Everything becomes flexible, hot and pleasurable. I “resonate” in the air that resonates in my flesh. Each resonance has its own dramatic fabric that I decipher and guide in the space (or the spaces: the places, other people’s bodies, my recesses). I allow myself to flow. I am present.

This work developed my awareness of my physical patterns and my capacity to project myself into new geometric worlds. Thanks to the memory of the senses, or what I can sense in a dance situation, there is no need to move in order to feel a movement or a space, as the senses and the mind reconstruct them without any need for action. I can therefore choreograph without an exploratory phase in a studio.

This inspired me to create on the basis of thoughts arising from dance using abstract processes. Taking contemporary music as an example, the possibility of using symbols to write choreographic composition seemed to me a promising poetic medium. I then studied Kinetography Laban with Jacqueline Challet-Haas. This system principally allows you to write down a dance that already exists, but it is also possible to use it in a more creative way, to invent choreographic spaces. I started developing my own language based on Kinetography Laban.

The formalisation of my system of writing choreographic composition was largely influenced by my meeting with the IT engineer and ethnomusicologist Frédéric Voisin as well as my collaboration with the composer Kasper T. Toeplitz.

FROM IDEAS TO GESTURES

PRESENTATION OF MY WRITING SYSTEM:

Kinetography Laban sets a dancer in a cubic space with a certain number of horizontal and vertical co-ordinates, which can define gestures corresponding to spheres divided into 8, 16 or 24. As a result of this vision, the space around the dancer, the volumes into which I can invite dancers to extend themselves, consists of spheres or cylinders that can be formed in different ways in the imagination, depending on the choreographic and poetic necessities. I owe my understanding of this space to Frédéric Voisin with whom I worked while I was studying and questioning the principles of the Laban notation system.

Voisin helped me to introduce an open evaluation system that seemed better suited to the immaterial architectures that give rise to all the poetry in my dancing. He developed a small software program (LOL), a two-variable data table that enabled me to relate parts of the body, or objects, to the categories of movement with which I wanted to work. The evaluation system is determined by the spatial parameters of the choreography. Each part of the body is assessed in each movement category in accordance with the pre-determined spatial evaluation. The program calculates all possible combinations using selected data. I used it from 2000 to 2004. It was a fantastic tool that taught me to recognise my preferences among all the possibilities.
However, the key learning experience of using the program was that, by opening up the evaluation system, we (Laurence Marthouret, the notator involved with the project and myself) discovered we could no longer translate the LOL tables into Kinetography Laban. I consulted my Laban teacher Jacqueline Challet-Haas about particular choreographic problems. I asked her how I could write down in Kinetography Laban a piece developed using LOL (e.g. Marine, a solo created at the Festival de La Bâtie in Geneva in September 2001 for the dancer Cindy Van Acker) in which the basic space is a sphere divided into 7? Jacqueline’s response was immediate: “It’s impossible.” She therefore encouraged me to develop my own personal method for writing choreographic composition.

In September 2002, I therefore started to develop a system of symbols that accepts the 360° of a circle and which, depending on the desired spatial parameters, allows the spheres around the dancer to be divided into 360, or into 7, 11, 47, etc. Everything is conceivable, including parameters with unequal angles. Carole Garriga (notator and dancer with the company since 2000) has been helping me conduct this research, which continues to develop, since 2004. The series of symbols below inform dancers about the division of space along the horizontal plane (the directional plane). The symbols are based on the cross Jacqueline Challet-Haas uses as a teaching aid.

The symbols below show either an irregular division of the space, or that one area of the horizontal plane is not used.

The following symbols show movement on the vertical plane; the thick black line indicates the level to be attained.
These crosses, whose meaning is altered by other symbols, are integrated via a reference system determined by the choreographer: this could be particular articulations, or the axis of the dancers, the locations, particular points in the body or the space. Their numerous co-ordinates are determined by the idea of direction on the horizontal plane and by the notion of level on the vertical plane. These two ideas evaluate the gestures (rotation, flexion, translation, curling up, somersaulting, changing the direction or level of the limbs), the activities (travelling, gyration, change of direction and level of the whole body) and the relational movements (distance, contact, address\(^1\), support).

The meaning of the motor elements (bodies, parts of the bodies, bodily systems, any object integrated into the choreographic environment, and concentration, i.e. the mind and the ten pair of indriyas) as well as of the movements themselves and the information given by the crosses, is defined further along with transitions, in accordance with the wishes of the movement author, from imprecise to extremely precise. Finally, the proposed direction or definition is not always an absolute value. It can also be a variable, i.e. when it is calculated by the performer who decides the reference point on which the calculation will be based.

Timing comes from the spatial organisation of the score. The development of timing is either chronological or dislocated, the duration of the actions more or less precise, and here again I allow myself to be flexible. As far as my own work is concerned, I mostly avoid staccato rhythms (accelerations, ruptures, sudden changes in direction) in favour of putting myself into a continued period of listening, a smooth rhythm. My dances are made up of variations of slowness.

Writing choreographic composition is not descriptive; it outlines an idea for the senses. It operates like a system comprising instructions that relate to different elements of the choreographic environment, like strata of data that tell the performer about the poetic universe: it is an open score.

I see each choreography as an opportunity to invite performers to be present and aware of their actions and what is going through them. The idea is to avoid being trapped in motor habits by creating compositions that stimulate their creativity: they have to make choices, perform actions, confront the unexpected in situations they have not yet experienced. They are not allowed to fall into a familiar pattern inside of a particular dance; what is required is their capacity to understand what is happening and to react to it immediately. Each performance of the same show is therefore unique.

**SYSTEMISATION OF READING AND WRITING A CHOREOGRAPHIC SCORE IN REAL TIME:**

For certain projects (*Contraindre* 2004, *This is My House* 2005), the scores assimilate themselves into the writing systems (computerised) that disrupt and recreate the pre-written composition in real time: the program controls the entire score (the actions, the composition and its rules) and it generates millions of possibilities for movement sequences. The computerised

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\(^1\) *Address* is a term used by Ann Hutchinson Guest to refer to "active relating" in *Your Move: A new approach to the study of movement and dance*. Taylor & Francis Ltd. 1995. P. 129.
system is at the centre of the relationship between space and time and allows for the gradual development of the piece, the structuring of new contexts.

The performers steer the processes that modify the choreographic score via recording systems (sensors) and in a more or less conscious way: it is an organic process, the result of a computer-based analysis that is often beyond the dancers’ control but never their intuition, which is their co-author.

THE SCORE OF THIS IS MY HOUSE:

Before coming onto the stage, each dancer selects a score that comprises a series of instructions. She can carry out the instructions suggesting different actions each time the instructions are repeated, although in this case the modulations of the dance do not allow the software program to recognise a cycle, or she can perform the same actions each time the instructions are repeated, in which case the cycle can be read by the program.

Below is an example of the rules recorded in the program for the start of the piece:

![Diagram of the score selection process]

[English translations for the above figure:]

Intro. figure 2 case  
2 or 3 dancers have danced a repetitive phrase  
(arrow)  
So the score displayed will be of moment 1b, then 2b, then 3b.

Intro. figure 1 case  
4 or 5 dancers have danced a repetitive phrase  
(arrow)  
So the score displayed will be of moment 1a, then 2a, then 3a.

Intro. figure 3 case  
0 or 1 dancer has danced a repetitive phrase  
(arrow)  
So the score displayed will be of moment 1c, then 2c, then 3c.

The introduction, suggested by the dancers, is originally from the first score, which is displayed on ten downward-facing LCD screens (see figure below. Photo: Rémy Müller)
Below is grid 1a:

For moment 1, this grey bar will disappear in five minutes.

Let's imagine that the five dancers, equipped with sensors, perform score 1a for five minutes. Using the information recorded, and in accordance with predetermined rules, the computer makes choices for the score of moment 2a.
FOR 2a
Breath (B) sensors

B-case for figure no. 1  B-case for figure no. 2  B-case for figure no. 3

The symbol below is to be put into case 3, replacing the “Xs” with each dancer’s initials.

(symbols)

The initials possible are: A D J M V

The symbols above (indicating movement by the group or certain people in the group) are produced by analysing the information gathered from breath sensors. Below are the rules governing the analysis:
A- If the moment danced was moment 1a:

1- During moment “1a”, the program analyses the synchronisation of the breath of the 5 dancers for 5 minutes. This will influence the score for moment 2a in terms of DISTANCE. See the score for how this alters the display.

B-case for figure no. 1:
The dancers were very much in phase, which means that, for breathing, they were in phase 4 times or more (to check when repeated).

B-case for figure no. 2:
The dancers have been in phase for breathing between 1 and 3 times (to check when repeated). Here, the program should also note if there were 4 dancers together, how many times, and which dancers, or 3 dancers together, or 2, etc.

B-case for figure no. 3:
The 5 dancers have never been in phase for breathing. The program must still note, however, if there were 3 dancers together, how many times, and which dancers, or 2 dancers together, etc.

So for the distance in moment “2a”, all dancers come together.

So for moment “2a”, the 4 dancers who were the most in phase come together. GIVE THEIR NAMES. Or the 3 dancers who were most in phase come together while a random selection takes place among the 2 remaining dancers to bring 4 dancers together. Or the two dancers who were most in phase come together and a random selection takes place between 2 of the remaining 3 dancers, so that 4 dancers come together. Or 4 dancers are chosen by a random selection.

So for moment “2a”, the 3 dancers who were the most in phase come together. Or the two dancers who were most in phase come together and a random selection takes place among the remaining 3 dancers, so that 3 dancers come together. Or three dancers are chosen by a random selection. GIVE THEIR NAMES.
The analysis invites certain dancers to come closer together, the symbols moving the group will thus influence the different forms of contact, the harmonising of the breath encouraging proximity.

**FOR 2a**

The distance will include “the constraint”, an indication of contact between the dancers to fill in **CASE 2**.

- If B-case for figure no. 1
- If B-case for figure no. 2
- If B-case for figure no. 3

Replace the “Xs” with the initials of the dancers concerned.

The initials possible are: A D J M V

Gyroscope sensors on the dancers’ heads will influence the order of movement in time. Below are the symbols to which they are correlated. Dotted lines give the chronological order of the two movements: if the line between the two actions is grey, the performer has to execute the movement on the left and then on the right; if the line is dotted, she can choose the order in which she will dance the two movements.
English translation for the above figure:

FOR 2a
Gyroscopes (G) sensors
G-case for figure no. 1  G-case for figure no. 2  G-case for figure no. 3

The first measuring bar L1 is dotted, the second, L2, is in grey, the third, L3, is dotted.

The first two measuring bars, L1 and L2, are dotted, the third, L3, is grey.

L1, L2 and L3 are dotted.

These are the rules:

2- Pendant le moment "1a", le programme analyse la synchronisation des capteurs gyroscopes des 5 danseuses, sur 5 minutes: cela influera pour la partition "2a" sur la CHRONOLOGIE des événements.

G-Cas de figure n°1: les 5 danseuses ont été très en phase. C'est-à-dire que les gyroscopes des 5 danseuses ont été en phase entre 1 fois et 3 fois (à vérifier en répétition).

G-Cas de figure n°2: les gyroscopes des 5 danseuses n'ont jamais été en phase.

G-Cas de figure n°3: les gyroscopes des 5 danseuses n'ont jamais été en phase.

[English translation for the above figure:]

2- During moment "1a", the program analyses the synchronisation of the gyroscope sensors of the 5 dancers for 5 minutes. This will influence the CHRONOLOGY of events for score "2a".
G-case for figure no. 1:  
the 5 dancers were very much in phase, which means that the gyroscopes of the 5 dancers were in phase 4 times or more (to check when repeated)

G-case for figure no. 2:  
the gyroscopes of the 5 dancers were in phase between 1 and 3 times (to check when repeated)

G-case for figure no. 3:  
the gyroscopes of the 5 dancers were never in phase.

NB: The gyroscope sensors follow movements of the head in the space like a small compass.
We (Rémy Müller, assistant at the IRCAM (Institute for Music / Acoustic Research and Co-ordination, France), and myself) decided to analyse the resonance of the curves formed by the head in motion and this by comparing their speeds rather than the point where they end up, as I could see no relevance in knowing whether the dancers’ heads were moving in the same direction at the same time or not. In this example, being in time means extending towards each other with the head leading and at a similar speed. It is of no importance if one dancer’s head is down and the other’s up.

Furthermore, and more generally, being “in time” for this piece always means being “in resonance with” rather than carrying out a series of identical movements at the same time.

The symbols below relate to the analysis of information provided by sensors on the hips. Only three dancers out of five are equipped with these sensors (two have one sensor each on the left hip; the third dancer has it on the right hip). These symbols of gestures (curling up, changing direction, balance) are set out in different colours: the gesture in red has to be executed several times; the dancer can decide whether to perform the gesture in blue one or several times; the gesture in black can only be carried out once.

[English translation for the above figure:]

FOR 2a  
Hip (H) flexion sensors
H-case for figure no. 1  The “movement category” symbols in cases 8, 9, 10 and 11 turn red or blue

H-case for figure no. 2  The “movement category” symbols in cases 8, 9, 10 and 11 turn blue

H-case for figure no. 3  Nothing

The rules for moving the hips are as follows:

3- Pendant le moment “1a”, le programme analyse sur 5 minutes, la synchronisation des capteurs en fibre optique de l’articulation des hanches, des 3 danseuses qui en sont équipées ce qui influera pour la partition “2a” sur le caractère REPETITIF des actions.

F-Cas de figure no.1: les capteurs de hanche des 3 danseuses ont été en phase 3 fois ou plus (à vérifier en répétition).

F-Cas de figure no.2: les capteurs de hanche des 3 danseuses ont été en phase entre 1 et 2 fois.

F-Cas de figure no.3: les capteurs de hanche des 3 danseuses n’ont jamais été en phase.

[English translation for the above figure:]

3- During moment “1a”, the program analyses, for 5 minutes, the synchronisation of the fibre-optic, hip-articulation sensors worn by three dancers. This will influence the REPETITIVE nature of the actions in partition “2a”.

H-case for figure no. 1: the hip sensors of the 3 dancers were in phase 4 times or more (to check when repeated)

H-case for figure no. 2: the hip sensors of the 3 dancers were in phase 1 to three times (to check when repeated)

H-case for figure no. 3: the hip sensors of the 3 dancers were never in phase

NB: For This is My House, the different principles governing the writing of the entire choreographic score based on the data gathered are as follows:

• Cyclical nature of the movement of each dancer for the introduction
• Synchrony between the dancers (breathing, hips, shoulders, elbows, ankles and heads)
• Researching the most synchronous family of sensors
• Assessment of activity (energy of the movement for the sensors on the hips, shoulders, elbows and ankles)
• Phrase recognition

This is grid 2a at the start. It is incomplete: some elements are missing while some could be modified (by changing the colour of the gesture symbols).
For moment 2, this grey bar will disappear in 5 minutes.

After using the program to analyse the five minutes of dance of moment 1a – captured via the sensor-based recording system – we obtain the following results:

- Breath: figure 1 case, therefore contact figure 1
- Gyroscope: figure 3 case
- Hip sensors: figure 2 case

The initial score for 2a will therefore be completed and modified, in accordance with the rules governing it, based on what has happened on the stage during 1a. The 2a score displayed will be the following, for example:
For moment 2, this grey bar will disappear in 5 minutes.

This is My House has a tree-like structure with three “branches”: the first branch (a) is structured; the second (b) is partly structured; the third (c) is randomly structured. Each branch is made up of eight grids, each one filled in accordance with its own modalities. Based on the data captured, the program calls up a grid belonging to one or other of the branches. So, in a show, dancers perform a sequence of eight grids made up of a and/or b and/or c.

Reading and dancing

The displayed grids, presenting the dancers with different focal lengths as well as the general constraint of extreme slowness, produce a tense dance located somewhere between mental anticipation and physical awareness. The score leads performers to invent extensions using the space of their own bodies, towards whatever surrounds them (air, floor, walls, supports, other dancers’ bodies). It stimulates a game of movement, inviting dancers to create shapes and volumes, both inside and outside of themselves that they explore, move, model, push or widen. A dancer’s attention is divided into (a) aiming for an imaginary space, created by the score, and (b) awareness of the delicacy of the transition between past and present action.

Dancers have to anticipate and embody, to tense and to release. Each performer is the architect of these opposing factors that allow the drama in their characters to emerge: they release strange creatures – part-man, part-woman, part-animal – and they accompany them with the breath, watch them approach or move away, in a confrontation with themselves. The more this tension between anticipation and embodiment sets in, like a broadening of awareness, the more the dancers discover denouements: the sequence of actions arranges itself like a series of facts, as the demands of the situation lead them to “let go”.

[English translation for top of the above figure:]

*For moment 2, this grey bar will disappear in 5 minutes.*

*This is My House* has a tree-like structure with three “branches”: the first branch (a) is structured; the second (b) is partly structured; the third (c) is randomly structured. Each branch is made up of eight grids, each one filled in accordance with its own modalities. Based on the data captured, the program calls up a grid belonging to one or other of the branches. So, in a show, dancers perform a sequence of eight grids made up of a and/or b and/or c.

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By arranging the multiplicity of focal lengths, the choreographic score therefore creates anticipation of the interpretation; the breathing techniques at the basis of the physical work allow for the embodiment of the data in the choreographic composition; and the dancing takes place in the privacy of the body and mind.

Myriam Gourfink, August 2008

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