



“*CARTOGRAPHY bodymemento*”

Documentation

On the first Interdisciplinary Seminar on Choreography in Theory and Practice

With great support of:



DANUBE UNIVERSITY KREMS
International ChoreoLab Austria – ICLA

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WELCOME
TO
THE

INTERNATIONAL
CHOREOLAB
AUSTRIA

Mission Statement

International ChoreoLab Austria (ICLA) is a pilot project of **Danube University Krems** in cooperation with **Tanz Atelier Wien**. This project is dedicated to providing continuous education in the context of dance and choreography on a university level. The main focus of the project is to foster discourse on an expanded understanding of choreography, which links contemporary dance, theoretical excursions und performative training across the disciplines.

Seminar Programme

//Saturday, September 5 (Arrival until 6.00 pm)

8.00 pm Official opening of the International ChoreoLab Austria
AudiMax, Campus Krems

//Sunday, September 6

10.00 am Introduction

10.30 am *Dancing in Space I*, Gus Solomons Jr., Tisch School of the Arts at NYU

02.00 pm *Dancing in Space II*, Gus Solomons Jr., Tisch School of the Arts at NYU

//Monday, September 7

09.30 am *CARTOGRAPHY bodymemento*, Sebastian Prantl, Tanz Atelier Wien

11.30 am *Campus Arts Excursion*, Gerhard Gensch, Danube University Krems

02.00 pm *Static Movement - Shaping Architectural Space*,
Renate Hammer, Department for Building and Environment,
Danube University Krems

04.00 pm *Sundowner*, Sebastian Prantl, Tanz Atelier Wien

//Tuesday, September 8

09.30 am *Dance Composition - A Historical Survey on Choreography
From Ancient to Modern*, Vera-Viktoria Szirmay,
Department for Arts and Management, Danube University Krems

11.30 am *Roll out the Magic Carpet and Be Well Grounded I*,
Ulrich Beckefeld, Anja Ohliger, osa – Office for Subversive Architecture

02.00 pm *Roll out the Magic Carpet and Be Well Grounded II*,
Sebastian Prantl, Tanz Atelier Wien

06.00 pm The Austrian *Heurigen* Culture

//Wednesday, September 9

10.00 pm *Dance and the New Media*, Johannes Birringer, Brunel
University, School of Arts, London

02.00 pm *Mind in Motion I*, Gill Clarke

07.00 pm *Art & Space*, Concert, piano: Cecilia Li,
visuals: Gabriella Cardazzo/Duncan Ward

//Thursday, September 10

09.30 am *How the Brain Makes a Move: Physiology of Willed Action*,
Michael Brainin, Department for Clinical Neurosciences,
Danube University Krems

10.15 am *Concerted Action of Movements: Pathology of Willed Action*,
Michael Brainin, Department for Clinical Neurosciences,
Danube University Krems

02.00 pm *Mind in Motion II*, Gill Clarke

06.00 pm *Gill Out*

//Friday, September 11

09.30 am *Dancing with the Market: The Artist as Entrepreneur*,
Gerhard Gensch, Department for Arts and Management,
Danube University Krems

02.00 pm Workshop

07.00 pm *CARTOGRAPHY bodymemento*,
Intervention/Performance, Tanz Atelier Wien

//Saturday, September 12

09.30 am Summary Breakfast and Departure

Faculty/Guest Faculty

Gerhard Gensch is head and director of Studies of the Center for Contemporary Music and head of the Department for Arts and Management at Danube University Krems. After studying Music (organ, composition) at the Meistersinger Conservatory in Nuremberg Gerhard Gensch worked as editor for cultural affairs for some years. He continued his studies at the Freie Universität Berlin where he studied journalism and media science. Received his PhD with a dissertation at the Institute for Empirical Studies. As a senior lecturer and adviser he worked for five years for UNESCO. Numerous international lecture-series at Universities in Germany, Africa and Asia. Visiting Professor at Stradins University Riga/Latvia and EOC Udayana University Bali/Indonesia. Curator Campus Culture at Danube University Krems since 2002. Member of the board of directors “Ernst Krenek Foundation”. Published several books and received awards and scholarship for his artistic and journalistic work.

Sebastian Prantl was born in Vienna, Austria and received his performing arts education in New York in the early 1980ies, when he studied at the Dance Theatre of Harlem, the Martha Graham School, the Juilliard School, the Whitney Independent Studio Program and others. Together with the pianist Cecilia Li he founded Tanz Atelier Wien in 1988. Projects, productions, symposia are produced on an international basis. His orientation towards art related themes and live music gives him a distinct label in the growing Austrian Dance milieu. Sebastian Prantl's choreographic work has taken him to India, China, Taiwan, Canada, USA, Europe etc. As a key figure for independent dance enterprises in Austria he strove for lasting support and a centre for contemporary dance and choreography (Tanzquartier Wien). Several federal and European Art Awards followed. His teaching methodologies were introduced in various dance institutions all over the world. His solo/duo formats together with Cecilia Li remain the pivot point for international projects/co operations.

Johannes Birringer is a Houston and London based Professor in Drama and Performance Technologies at Brunel University as well as choreographer and artistic director of AlienNation Company. He has been developing a research group in England where he now co-directs the Design-and-Performance Lab at Brunel University. Earlier, Birringer was appointed head of the dance and technology program at The Ohio State University from 1999-2003. He is co-founder of a telematic performance collective (ADaPT), has explored telepresence in performances with international partners and directed numerous multimedia theatre, dance, and digital performances in Europe, America and China. He is author of Theatre, Theory, Postmodernism (1991), Media and Performance (1998), Performance on the Edge (2000), Performance, Technology and Science (2008). In 2003 Birringer founded the 'Interaktionslabor Göttelborn` - an interactive media lab in a former Coal Mine in southwest Germany which offers annual international workshops and labs in interactive and networked media technologies.

Architect DI **Renate Hammer**, MAS is the Head of the Centre for Architecture and Engineering Science at the Department for Building and Environment at the Danube University in Krems Austria. In 1987 she started an Architectural programme at the Technical University of Vienna and

additionally attended the Philosophy studies course at the University of Vienna. From 1992 till finishing her Architectural programme in 1994 she worked as a Tutor at the applied Aesthetics Research Laboratory. Continuing her education she joined in Postgraduate studies in Urban engineering at the University of Tokyo and Postgraduate studies of Solar Architecture at the Danube University Krems. She worked with different Architectural bureaus in Germany and Austria. Since 1999 she is self-employed Architect with a Membership at the Bavarian Architectural Association. She is member of the Platform for Architecture and Policy, the Advisory Board for building culture for the Austrian Cancellor and the Oxford Round Table. Between 1982 and 2003 she attended several dancing classes for instance in Vienna with Georg Blaschke, in Constance with Elke Scheller and in Paris with Marcelo Murriagui. Moreover she joined several summer schools with Joe Alegado or Mary Overlie in Vienna. In 1991 she did the stage design for "Der Fall F." by the dance theatre group Enigma at the "Theater Brett" in Vienna.

Gus Solomons jr (Dancer/Choreographer/Writer/Actor) - created the title role in Donald Byrd's The Harlem Nutcracker (1996-99); in 1998, he founded and directs PARADIGM, a repertory dance company for dancers over 50; he is an Arts Professor at NYU/Tisch School of the Arts; and writes about dance for Gay City News, Dancelnsider.com, and Dance Magazine. He has an Architecture degree from M.I.T.; danced in companies of Pearl Lang, Donald McKayle, Martha Graham, and Merce Cunningham, among others. From 1972 to 1994 he directed his own concert troupe The Solomons Company/Dance. In 2000, Solomons won a Bessie (New York Dance and Performance Award) for Sustained Achievement in Choreography; in 2001, he was awarded the first annual Robert A. Muh Award from M.I.T. as a distinguished artist alumnus; in 2004, he was given the Balasaraswati/Joy Ann Dewey Beineke Chair for Distinguished Teaching at ADF. In 2005, he became a Full Arts Professor at NYU/Tisch School of the Arts; and this year, he was appointed as a Phi Beta Kappa Visiting Scholar for 2006-2007, lecturing at various universities across the country.

Michael Brainin, MD, Dr (hon), FESO, FAHA, is Full Professor of Clinical Neurology at the Danube University in Krems, Austria, where he chairs the Center of Clinical Neurosciences. He is head of the Department of Neurology at the Landeskrankenhaus Donauregion in Tulln, a Vienna Medical School teaching hospital with 82 beds including neurointensive care and acute stroke unit. Since 2005, he also acts as director of the Department of Clinical Medicine and Preventive Medicine at the Danube University. He held positions in the European Federation of Neurological Societies (chair, Scientist' Panel on Stroke 2000-2004, member on the Scientific Committee 2000-2006), and is currently executive member of the European Stroke Organisation as well as of the World Stroke Organisation. He currently chairs the Education Committees of both the ESO and the WSO and has been active in conducting stroke teaching programmes in many regions, such as in China, Vietnam and South Africa. He directs several postgraduate teaching programmes at his university among them an MSc Programme for Neurorehabilitation and one European Master's Programme for Stroke Medicine (supported by ESO) which currently is attended by students from 24 countries. He has published more than 150 peer-reviewed articles. He is Associate Editor of the European Journal of Neurology and currently acts on the Editorial Boards of Stroke, Cerebrovascular Diseases, and the International Journal of Stroke. He was elected Fellow of the European Stroke Organisation, International Fellow of the American Heart Association/American Stroke Association and received an honorary doctor's degree from Hanoi University, Vietnam. He is honorary member of several scientific societies, among them the French Neurological Society and the Hungarian Stroke Society.

Gill Clarke studied English Literature and Education and is an Independent Dance artist/ movement researcher. She was a founder member of the Siobhan Davies Dance Company and has also performed and collaborated with other choreographers including Rosemary Butcher, Rosemary Lee and Janet Smith.

Gill leads masterclasses and workshops internationally for students, independent artists and professional companies including recent visits to University of the Arts, Berlin, Tanzquartier, Vienna, TSEH Dance Agency, Moscow, Siobhan Davies Studios, London.

Gill was Head of Performance Studies at Laban – London 2000-2006, received a fellowship from the National Endowment for Science, Technology and the Arts (NESTA) and is Co-director of Independent Dance – an organisation supporting professional dance artists in London. Gill has recently collaborated with videographer Becky Edmunds, has participated in cross disciplinary research projects through the Universities of Chichester and Aberdeen, and is currently involved in pedagogical research through Tanzplan, Germany. She recently undertook postgraduate study in the social sciences and is visiting professor at Ulster University.

Vera-Viktoria Szirmay is ICLA member of the academic staff at Danube University Krems. She received her first training in classical ballet at the Ballet School of the Vienna State Opera and graduated as dance artist from the Hungarian Dance Academy in Budapest where she also completed her studies in Ballet Pedagogy according to the Vaganova system. On graduating from the University of Vienna with a degree in Indology, Ethnology and Theater, Film and Media Studies she started her career as lecturer after having written her doctoral thesis on intercultural dance research. A government scholarship granted by the Austrian Federal Chancellery and a research project of the University of Vienna took her to India. Under the tuition of Madhavi Mudgal, Vera-Viktoria Szirmay pursued in-depth studies of Odissi, the classical dance of East India, in theory and practice. On her return she founded and became president of the Odissi Samskara Association as well as manager of Odissi Samskara Dance. In 2008, Vera-Viktoria Szirmay completed a postgraduate course on Cultural Management at the University of Vienna and the Institut für Kulturkonzepte. She performs internationally as Odissi dancer and choreographer, teaches classical ballet and works as a lecturer in the field of Dance Studies.

Ulrich Beckefeld, born in 1966, studied architecture and town-planning at the Institute of Technology, Darmstadt. With the foundation of osa - office for subversive architecture - whose eight members now live in different parts of Europe, he began to work on developing experimental methods of urban design and the ways in which patterns of meaning within urban and spatial systems as well as the character of interdisciplinary cooperation can be transformed.

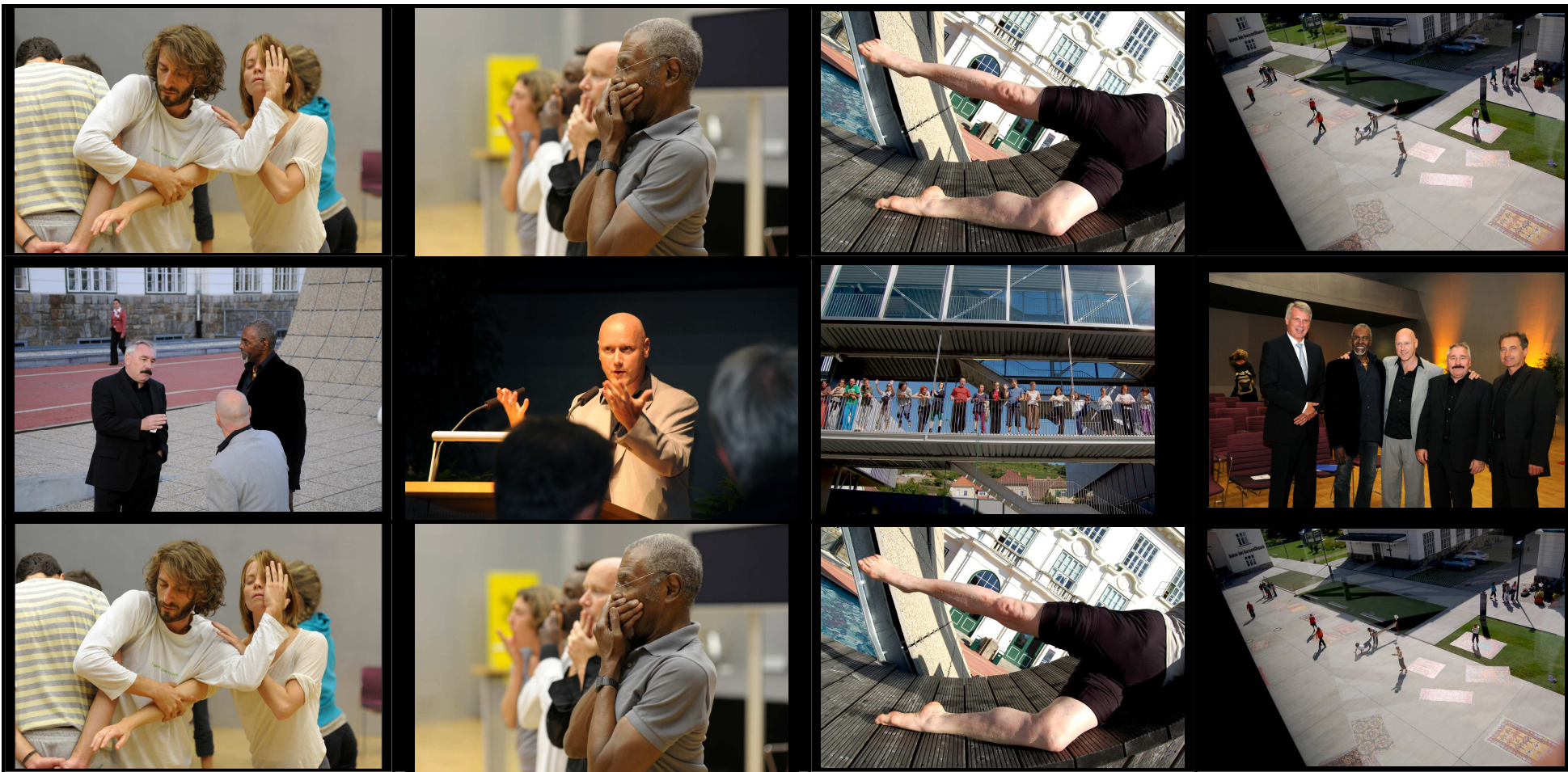
The last ten years have been spent in Vienna as free-lance architect. In addition, he also occasionally writes articles, particularly on the inherent logic of 'projects' and their relationship to a complex reality to which they adopt on the one hand, but can, on the other, only provide a selective topic for inquiry.

Anja Ohliger, born in 1967, studied architecture and town-planning at the Darmstadt Institute of Technology, still noted at the time for its emphasis on artistic design. In 1997, she founded, together with fellow students, osa, an office aiming to challenge traditional interpretations of urban correlations by means of experimental interventions. She has worked since 2000 at the Institute of Technology in Darmstadt as specialist and lecturer in the fields of urban development, building and spatial design, whereby particular emphasis is put on planning for limited urban spaces. Workshops and interdisciplinary projects serve to test integrative and praxis-orientated forms of teaching. Since 2006 she has been working as a Frankfurt-based free-lance architect in the field of 'insertions into existing fabric', advising clients and developing projects. Travels to a variety of European and non-European towns and cities have led to an interest in the different culturally-determined ways public space has been taken possession of and designed.

Participants

Beer	Sophie	Austria
Berndtzen	Celia	Sweden
Carradine	Caitlyn	USA
Draeger	Tobias	Germany
Fajana	Steven	England
Grützbauch	Magdalena	Austria
Hancock	Shannon Alana	USA
Held	Claudia	Germany
Kaupuza	Regina	Lettland
Kotlowsky	Nanina Raffaella	Austria
Lederhaas	Christina	Austria
Lemus	Olaya	Spain
Letukaite	Birute	Litauen
Loner	Dhana	Austria
Mayerböck	Veronika	Austria
Morgan	Emily Jane	USA
Nedelkovski	Vedran	Macedonia
Ogrisek	Luise	Austria
Piliponsky	Martin	Spain / Argentina
Rebl	Vera	Austria
Redl	Patric	Austria
Schwarzbach	Julia	Germany
Shen	Fang Yu	Taiwan
Simkó	Beatrix	Hungary
Wackerle	Elisabeth	Austria
Wagner	Manuel	Austria

Gallery



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“CARTOGRAPHY bodymento”

a choreological survey by Sebastian Prantl

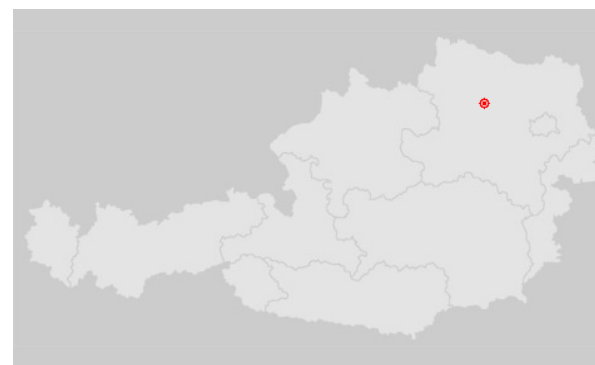
Choreological Studies is the discipline that has been established as a result of multi-dimensional ways of thinking about movement and space. Its concern is to widen approaches and practices that view dance and choreography beyond its performing art status and supply for a practically oriented continuous scholarship.

The utilisation and application of interdisciplinary choreological theories is the mission of the **INTERNATIONAL CHOREOLAB AUSTRIA (ICLA)** in general and my personal interest in particular. This application provides for the identification of the elusive quality of dance per se, which changes “meaning” from moment to moment and functions as a virtual component of movement itself, which must and can be explicitly addressed in terms of practice and theoretical discourse.

CARTOGRAPHY- body/space mapping, a point of beginning

Let me use the term cartography, away from its graphic connotation as a working tool, as a point of beginning in the interface of the human body and its performing nature. Thus, providing a drawing map as a reading device: asking questions, depicting temporal images, stirring up the imagination in the present leaving traces (memories). As this discourse functions only as a transitory framework- considering it’s continuously elusive and fragile status – the ChoreoLab understands itself as a survey in flux, all the more complex, challenging and aspiring.

The access, where upon to enter this lab remains oblique – as the investigatory scenario is bound to acknowledge the fact that its perspective (that of the protagonists involved) is relative to the playground (body/mind/space mapping). Can we define a neutral point of beginning, can we examine the boundaries of our space formation (moving grid or floating bubble)? How do we set frameworks in art- related domains, determine the radiance of its scientific working ground, its sociological context and interdependency (down fall). From where do we connect into the field of choreography?



PROPOSITION: cartogram- body/space map

The body/space map as a cartogram is one's self-representation in one's own brain from the very beginning on. If the body/space map is “accurate”, movement is efficient and self-stimulating. If the body/space map is “ambiguous”, movement is vague and inefficient. In body/space mapping, one gains access to one's own body through “self- inquiry” and “self- observation”. Already as infants we master multi-functional body/mind capacities and improve and expand our knowledge in regard to space in relative short time spans. We lay down our individual ground map for further definition and individualisation.

Further on, as we carefully process (correct) our own body/space mapping by assimilating information provided by kinesthetic experience, role models, auditory stimulation, visual information, olfactory and gustatory experience thru partnering, coaching and learning, we specify our individual characteristics of body and mind. We learn to recognize the source of inefficient performance (set backs, injuries) and how to guide and restructure movement so that is efficient, direct, and sustainable based on the truth about one's self-definition, function and affirmation.(Growing older we favour to move according to how our thinking defines us, rather than according to how our body/mind is actually structured. Unfortunately our mandatory schooling system creates a gap between physical and mental training, causing increasingly negative results in body/mind integration and general well-being).



Body/space mapping views the human body first of all from a structural perspective, not an anatomical, physiological, psychological, or sociological perspective. It reveals that the structure of the body's movement is inextricably linked with the structure of the body and surfaces individual movement, organised and arranged in particular ways. It identifies human movement as having five intrinsic structures, namely **body**, **action**, **space**, **dynamics** and **relationships**, all of which can be examined and explored separately. The relationships between them form an understanding of the principles of movement. It allows for the clear identification of what the mover does and what that creates by naming the perceptual properties of movement. When our movement display is based on our intrinsic, direct perception of body/space interplay, it becomes efficient, expressive, and appropriate for further enhancement (dancing). **Learning by moving!**

Cartographic survey is context specific...

What are distinguishing characteristics of context in regard to ones body/space mapping?

We need to select specific characteristics, choosing among manifold elements of perception (provisionally) in our discourse:

Body/space flow, body/space efficacy, body/space object, body/space dynamics...

Since we are discussing a “body in transition” we may select:

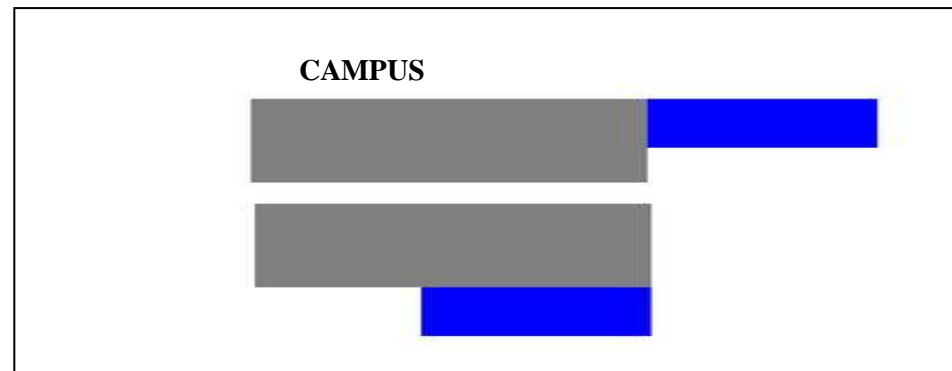
Cartography for an anonymous body- its moment, its memento...

Now, we want to discuss “Cartography bodymemento” in the architectural (land)scape of a specific context (campus), stimulating an interface between body/structure/efficacy and space/structure/efficacy. The intention of the ChoreoLab “Cartography bodymemento” is to understand the campus as a vessel wherein science (mind) and art (activity) can merge, both in a sustainable and exemplary manner as an immaterial, universal space. That will be formed above all by the performance of the investigators (the ambition of protagonists of all kind) and does not persist as a static physical-spatial structure nor in a “theoretical cyberspace”. The lab does not intend a voyeuristic approach in regard to the formal reality of the architectural space (scape) but rather tries to get in “contact” with it, being affected by it. It intends to provoke inspiration and stimulate freedom in manifold behaviour.

“Occupying” a space (scape), no matter how ambivalent and unknown it may be, recognizing its texture, its status, its history, learning to understand it and transcend it, is the challenge. (Presumably it is a physical and mental task to develop rituals for newly defined territories).

street

vinyard



river

Space is a living entity!

train

“Cartography bodymemento” strives for an unpredictable body/space efficacy in its transitory mode, claiming that the “affectation” exists in both entities, forming ever new configurations. In that sense, anonymous assumes non-identification, and stands for transformation in power, a possibility of relating, without co-existing. In homage to nomad concepts, the anonymous transgresses beyond finite forms.

How do we create an anonymous body?



Suggesting a survey on specified physical/mental states

Physical means here: all the continuously changing modifications in the body/space mapping produced by the permeability between body and its context. This relation allows for the body to decay and to reconstruct itself (body in rest/body in motion). The instability is status quo. Mapping means the conscious accompaniment of moving/thinking, contemplating, meditating, resting, reviving...

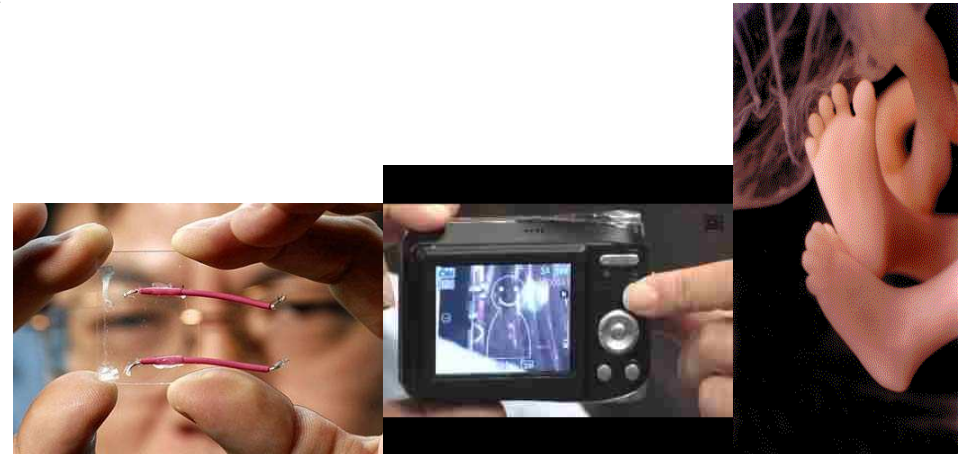
Expectations, results

The survey stands for its own cause rather than pre-describing a final result, developing along a flexible, multilateral compositional structure without narrative. It opens a gate wherein thinking and moving coincide in the fluctuating present moment. While exploring in the field of possibilities, the body/space mapping gives unceasing impulses for body/mind transformation towards efficacy- affecting and expanding our knowledge:

- the body and its surrounding space are always interrelated through time, sound, energy, focus, experience framed by memory etc.
- understanding specific sites (architectural frameworks) through manifold mapping and arriving at detailed configurations is accomplished (un)intentionally.
- projecting onto utopian contexts as extensive phenotypes of body/space mapping suggests itself.

Some tools and techniques

- simplification** (abstracting) a tool wherein retaining shapes, scapes, objects and movement alter (reduce, enhance) specifications in order to formulate other (significant) meaning
- combination** (chaining) serves to delete separation of features when they are irrelevant to the map focus
- highlighting** (illuminating) underlining specific elements within the cartographic reading mode
- scanning** (reorganizing) the activity in the mapping process- it may foreground details by chance, proposing new investigatory positions
- acceleration** (speeding/pacing down) within the mapping process in order to investigate intricate time codes in a dynamic process
- distillation** (smoothing) can be employed in order to reduce the complexity and/or enhance the transitory aspects in enciphering cartographic frameworks
- fragmentation** (separating) frameworks in order to intensify details and/or provoke new connections



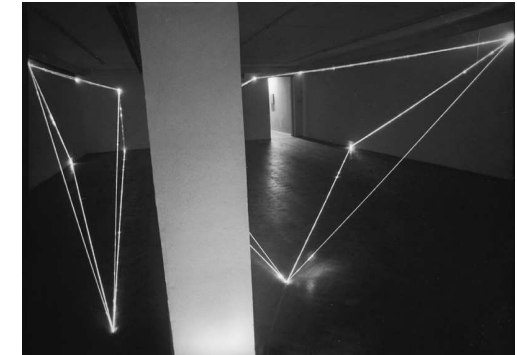
Fingers and toes are distinct and have nails. The fetus begins small, random movements, too slight to be felt. The fetal heartbeat can be detected with a heart monitor. All major external body features have appeared.

How do we perceive space?

(following chapters on perception are distilled and quoted from the Encyclopaedia Britannica)

We engage in a process through which we become aware of the relative positions of our own body and objects around us. Space perception provides cues, such as depth and distance that are important for movement and orientation to the environment:

The study of perceptual learning developed rapidly in the second half of the 19th century and still more rapidly during the 20th. Many psychologists who deal with perceptual function hold that the study of space perception is rapidly becoming a distinct branch of psychology in its own right. This special field within psychology concentrates on the factors contributing to the perceived organization of objects in space (e.g., on cues to depth perception, movement, form, colour, and their interactions) or dwells on particularly interesting special problems such as that of amodal perception (e.g., the question of how one perceives that there are six sides to a cube, even though only three of them can be seen at a single time).



Space perception research also offers insight into ways that perceptual behaviour helps orient the individual to the environment. Specifically, orientation in space typically seems to reflect one's strivings (e.g., to seek food or to avoid injury). People could not orient themselves to their environments, however, unless the environmental information reaching them through the various sense organs offered a perception of space that corresponds to their physical "reality." Such perception is called veridical perception—the direct perception of stimuli as they exist. Without some degree of veridicality concerning physical space, one cannot seek food, flee from enemies, or even socialize. Veridical perception also causes a person to experience changing stimuli as if they were stable: even though the sensory image of an approaching tiger grows larger, for example, one tends to perceive that the animal's size remains unchanged. In other words, one perceives objects in the environment as having relatively constant characteristics (as to size, colour, and so on) despite considerable variations in stimulus conditions.

Primary gravitational effects

Not all perception of space, however, is veridical; instead, perception may fail to correspond to reality—often in some systematic way. These are cases of nonveridical perception. Experiments have shown that the three basic spatial planes (horizontal, vertical, and sagittal) dominate the ability of the individual to localize visual objects in nearby space. Often, objects can be perceived as lying closer to these basic dimensions or planes than they really are. (Part of the explanation of these perceptual discrepancies in visual experience may lie in the force of gravity.) Nonveridical perceptions do not generate chaos in one's perception of space. Instead, they clarify the perceived characteristics of surrounding space. If all of the mass of sensory information available at a given moment were perceived veridically, the flood of data might confuse the perceiver to the point of disorientation. In other words, some degree of selectivity in perception appears to guide the survival of the individual. Ideally, information about the environment is perceived only as it is relevant to the goals, needs, or physiological state of the individual at a given moment.

Visual factors in space perception

On casual consideration, it might be concluded that the perception of space is based exclusively on [vision](#). After closer study, however, this so-called visual space is found to be supplemented perceptually by cues based on auditory (sense of [hearing](#)), [kinesthetic](#) (sense of bodily movement), olfactory (sense of [smell](#)), and [gustatory](#) (sense of [taste](#)) experience. Spatial cues, such as vestibular stimuli (sense of balance) and other modes for sensing body orientation, also contribute to perception. No single cue is perceived independently of another; in fact, experimental evidence shows these sensations combine to produce unified perceptual experiences.

Despite all this sensory input, most individuals receive the bulk of the information about their environment through the sense of sight, while [balance](#) or equilibrium ([vestibular sense](#)) apparently ranks next in importance. (For example, in a state of total darkness, an individual's orientation in space depends mainly on sensory data derived from vestibular stimuli.) Visual stimuli most likely dominate human perception of space because vision is a distance sense; it can supply information from extremely distant points in the environment, reaching out to the stars themselves. Hearing is also considered a distance sense, as is smell, though the space they encompass is considerably more restricted than that of vision. All the other senses, such as touch and taste, are usually considered to be proximal senses, because they typically convey information about elements that come in direct contact with the individual.



Perception of depth and distance

The perception of depth and distance depends on information transmitted through various sense organs. Sensory cues indicate the distance at which objects in the environment are located from the perceiving individual and from each other. Such sense modalities as seeing and hearing transmit depth and distance cues and are largely independent of one another. Each modality by itself can produce consistent perception of the distances of objects. Ordinarily, however, the individual relies on the collaboration of all senses (so-called intermodal perception).

Tactile-kinesthetic cues

When perceiving the distances of objects located in nearby space, one depends on tactile ([touch](#)) sense. Tactile experience is usually considered in tandem with kinesthetic experience (sensations of muscle movements and of movements of the sense-organ surfaces). These tactile-kinesthetic sensations enable the individual to differentiate his own body from the surrounding environment. This means that the body can function as a perceptual [frame of reference](#)—that is, as a standard against which the distances of objects are gauged. Because the perception of one's own body may vary from time to time, however, its role as a perceptual standard is not always consistent. It has been found that the way in which the environment is perceived can also affect the perception of one's body.



Visual cues

Perhaps the most important perceptual cues of distance and depth depend on so-called binocular disparity. Because the eyes are imbedded at different points in the skull, they receive slightly different images of any given object. The two retinal images of the same object are apparently perceived by the brain as a three-dimensional experience. The degree of disparity between the two retinal image—a phenomenon known as binocular [parallax](#)—depends on the difference between the angles at which an object is fixed by the right eye and by the left eye. Thus, in looking at the indicator needle on a [pressure gauge](#), for example, the effects of parallax will cause a person to make slightly different readings when using first the left eye alone and then the right eye. The greater the parallax difference between the two retinal images, the closer the object is perceived to be.



The phenomenon of binocular disparity functions primarily in near space because the angular difference between the two retinal images diminishes when viewing objects at a distance. Visual disparity can still be exploited over greater distances by using optical devices that magnify the parallax distance separately for each eye. Such devices include artillery [range-finding devices](#) and old-fashioned, three-dimensional picture viewers called [stereoscopes](#).

In what is called visual [movement](#) parallax, distance cues are obtained from retinal changes that depend on the interposition of objects in space. Thus, when the individual moves his head either from side to side or forward and backward, the [retinal](#) image of a nearby tree moves more, while that of a distant tree moves less. Unlike binocular disparity, which functions only in [binocular vision](#), movement parallax is especially important for judging distance when only one eye is used (monocular vision).

Another group of visual images, called [perspective](#) projections, provide perceptual cues that are independent of monocular or binocular vision. Although estimates of distance—based on such perspective effects as the apparent distant fusing of [railroad tracks](#) in a single point—are incompletely understood, they are thought to depend heavily on learning. Such phenomena illustrate the tendency of the individual to integrate perceptions into consistent and invariant wholes. Experiences of perspective may be generated by putting appropriate lines in an [oil painting \(linear perspective\)](#), by gradations in the tint of the paint (colour perspective), and by viewing the surface of the Earth from an airplane ([aerial perspective](#)).

Still another group of visual cues of depth and distance consists of apparent differences in object brightness. In experimental studies it is found that the brighter an object appears, the closer it seems to be. Thus, a white card against a dark background seems to recede or to move forward as the level of illumination on the card is experimentally varied. Similar effects can be induced by changing the colour (hue) of an object—e.g., from bright red to dark red.

Auditory cues

Auditory cues for depth perception include [sound intensity](#) (loudness), auditory pitch, and the time lapse between visual perception and auditory perception (for example, one hears a distant cannon after seeing the flash and smoke of the explosion). Changes in [pitch](#) also function as depth cues. For example, when a moving object (such as a train or an automobile) emits sound waves (say, from its horn), the pitch of the sound seems to rise when the object is approaching the perceiver, but it seems to fall when it is moving away. This is known as the [Doppler effect](#).

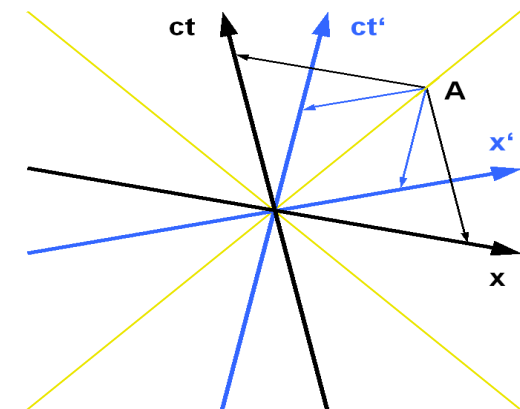


Interrelations among the senses

In humans, the [development](#) of the ability to perceive space normally depends on interaction between the senses of sight and touch. Toward the end of the first year, a child starts using the hands to touch and to explore objects. Because sight begins to function more efficiently at a later time, the child's sense of touch at this stage of development is very sensitive. The part played by other senses (e.g., [hearing](#)) does not appear to be as fundamental in perceptual learning among young children. Without vision or touch, however, most people are seriously hampered in learning a detailed, well-articulated perception of space. Even blind people may find it difficult to understand space with nothing but auditory cues. It is well known that people with full sensory endowment learn to locate the sources of sounds by consulting both their visual and tactile experiences.

Success in orientation—in moving about effectively and without accident in everyday pursuits—is highest when environmental information is available through as many senses as possible. Impairments to orientation occur when the range of sensory stimuli that forms the usual basis for the experience of perceptual space is reduced. When visual cues are sharply reduced for sighted people, they complain of disorientation. For example, settings that are familiar by daylight may be completely foreign in darkness.

Apparently, by learning about systematic relationships that exist among a number of simultaneously available stimuli, people can perceive distances more or less correctly. Experiments have shown that the distance (in depth) between selected objects in photographs is most accurately estimated when the objects have been filmed in a richly organized environment—e.g., many people standing at different distances from the camera. Conversely, it is very difficult to make a reliable judgment about the relative depth of two vertical rods when they are presented against a background that lacks other cues.



Factors of constancy

In general, the perceiver controls, sifts, and corrects the considerable range of sensory information offered by isolated local stimuli. The specific nature of these “corrections to conform to reality” will depend on the unique combination of stimuli at any given moment. In this way, spatial perception tends to ensure that a person experiences the continually changing circumstances of the environment with some degree of stability or constancy.

This “realistic” perception, based on an awareness of the real, physical world, is an aspect of so-called object constancy. In the experience of size constancy, for example, within a radius of a few hundred yards from the observer, the size of objects is perceived to remain roughly constant no matter where they are. Constancy of form means that an object is perceived to retain its fixed characteristic shape regardless of variation in the angle at which it is observed; for example, a pencil seen end-on shows only a small circular profile but is still perceived as a pencil. Colour constancy clearly illustrates the way in which the brightness and hue experienced over the surface of an object are determined by direct comparison with other objects; a lump of coal still is perceived as black whether the sun is shining brightly or whether there is a dull, cloudy sky.

Path recognition: navigation in space

Different species are equipped in various ways for the recognition of their path of movement. Some use olfactory signals in recognizing paths of varying distance; this is encountered both among social insects such as ants and among many mammals. Certain insect larvae can retrace their path of movement by following extremely fine webs or filaments spun during their advance. Many species also seem to navigate by the Sun. Migratory birds are able to orient themselves by stars in twilight or at night (*see* migration). Other navigational cues include the effects of gravity, temperature changes, and direct visual observation of landmarks such as rivers. Even greater demands on the human senses of vision and balance are made in spaceflights, because a person is effectively weightless in outer space. At one laboratory maintained by the U.S. Navy, an enormous, very slowly rotating cylindrical chamber is used to study variations in perceptual sensitivity. Test subjects remain in this simulated “outer space” environment for variable periods (even days at a time) in an effort to anticipate the short-term and long-term effects of interplanetary flight.



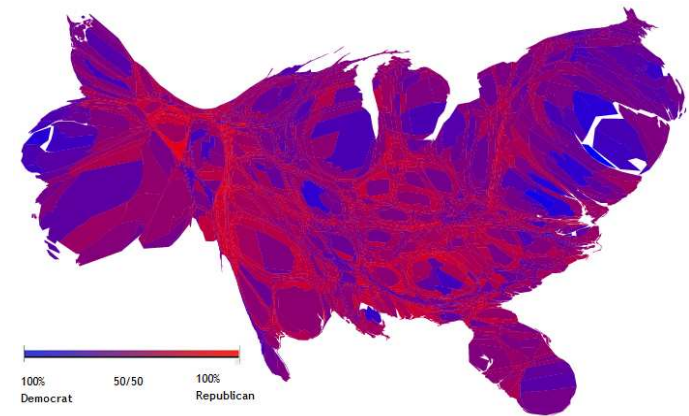
Social and interpersonal aspects of space perception

Many animal species that use nests, lairs, or dens and care for their young will typically defend a specific territory. This process is observable in birds and among seals during the breeding season. Apparently this territorial behaviour depends on a rather precise perception of space, because the animal ceases its defensive maneuvers when an interloper passes out of the territory by moving across the “border.” The social distances maintained by primates (such as human beings and apes) are thought to result from territorial groupings. Modern architecture is held to be influenced by a human tendency to divide into small, separate family territories (just as birds do), the result being such structures as apartment houses. Geographic distance may also be maintained to separate individuals who belong to different social groups, as seen in the ethnic neighbourhoods of many cities.

Material: mapping out the environment in red or blue (black or white, rich or poor)?

How can we relate to an environment which is being designed in separation from its protagonists far away from their activities and aspirations? Born-in experiences and occupations are being constantly disrupted and altered as if the space could not make up its mind what it wants to harbour! States and landscapes are being kept anonymous thru votes and flat rates striving to develop a colour and shape:

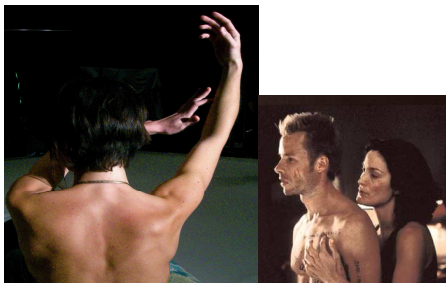
A cartogram depicting popular votes in the 2004 US Presidential election, in which the sizes of countries have been rescaled according to their population (Created by Michael Gastner, Cosma Shalizi, and Mark Newman of the University of Michigan) shows the map of the USA in form of a colourful monster (disgruntled bird?) as a memorial of the manipulated outcome of the elections 04.



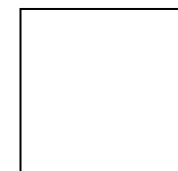
Tool/Exercise

Exercise for two objects, partners on imagination of color following a shamanistic ritual/work out: hold up your hands vis a vis each other/do not touch each other/ feel the energy flow thru the hands. One person imagines/thinks about red or blue- the other has to guess the right color by telling...

Extension: *bodymemento*



moment – memento



Flashback:

Flash- back technique as a tool for improvisation (movement, text, other) re-organizing memory (memento patterns), providing the ability to “restore” and “change” intricate scenarios to its “previous state” by means of detailed recapitulation practice. Fragmentation caused by interruption of the transitory flow within (movement) scenes created by protagonists is access and departure point for ChoreoLab activities.

Any organized framework, scape, plot or choreographic structure, consists of memento patterns – as they appear to be divers study cases in regard to duration, texture, dynamics, interplay... During the act of moving (speaking) time is differentiated, structured, and potentiated. We dance (tell) of the changeability of

things, the movements in and around us, and thereby shape the world. The beholder (the audience) follows these images and fuses them into temporal structures, perceptual properties and scenes: The potential understanding and reading into these structures creates enthusiasm, expectation and knowledge in the beholder processing meaning of various form. Thus, the performance becomes an issue on both sides of a “dividing line” (“orchestra pit”). Its message is being transported, potentiated and transmitted thru space and time! Dance consists (springs) of (from) the contemplation of counterparts (the other). The resulting world of imagery ends up embracing the opposite parts of a given space. It consists of images that we dream, that we work for.

It does not take an expert to tell the sweat-soaked masks from the real faces of the performers. It does not take any aural expertise to behold the hollow undertone in the steps that take us towards our future – our “progress”. However, it is necessary to listen very carefully in order to tell the kind of hollowness these steps betray. There are various kinds... If it can't be compared, it can't be understood. Are we producing tomorrow's events? Are we supporting yesterday's traditions? Do we surrender to the (TV) shows of the present? Are we celebrating holy masses? The first thing that comes to mind is baroque hollowness (a baroque party all over Austria). Back then, the entire Western humanity was walking over stages, in pompous progress. The baroque excesses caused all actions to become grand gestures. Our current excesses, on the other hand, seem destined to reduce all of our actions to fragments. The difference might be the origin of the excesses: While the baroque hollowness resulted from a subversive loss of faith in the dogmas of religion, our own hollowness stems from the loss of faith in ourselves?

During the study of memento patterns awareness is paramount. It is the challenge of the observer (choreographer) to understand and further develop these manifests. The task consists of cultivating a “household” of the growing imagery, taking care to put equal emphasis on the physical and the mental (spiritual) elements. It asks for a continuous, long-term process distilling and understanding authentic moving structures.

Thus, choreography is the art of expressing time spatially– periods of time are vested with quality – transmitting content to an audience. Is the gaze of the observer (choreographer) inspiring, provoking, manipulating and fostering? Does the mere contemplation of structure effect its change? Fragment-continuum: The collector (surveyor) sees it as a collection of experiences (memories). Never forgetting, however, that the personal perspective can not but remain a **fragment of the universe: “cartography bodymemento”**

On the computer:

The memento pattern is used by two objects: the originator and a caretaker. The originator is some object that has an internal state. The caretaker is going to do something to the originator, but wants to be able to undo the change. The caretaker first asks the originator for a memento object. Then it does whatever operation (or sequence of operations) it was going to do. To roll back to the state before the operations, it returns the memento object to the originator. The memento object itself is an opaque object (one which the caretaker can not, or should not, change). When using this pattern, care should be taken if the originator may change other objects or resources – the memento pattern operates on a single object. Classic examples of the memento pattern include the seed of a pseudorandom number generator and the state in a finite state machine.

