

Embodying Space: The Inside and the Outside of Soma in a Creative Process

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Abstract

Space is neither a “passive, three-dimensional container” nor a “backdrop for something more dynamic” (McCormack, 2013, p. 2). Space is a process, and so is the body; especially, since the body itself—or the soma, the living body—contains inner spaces, which can and do relate to the spaces outside the body. How do we perceive space and embody space on this multiple scale? How do we feel space, objects, and other bodies while we co-exist? What do those inside spaces transmit while the performers move or stand still through their presence? How can the director envelope and contain these dimensions and be “holding the space” in and around the process? Using Body-Mind Centering® vocabulary,¹ how to be the membrane around the fluid space? The BMC® embryological development studies open a new and even closer perspective to this space within “because it is the embodiment of space versus the embodiment of structure” (Bainbridge Cohen, 2012, p. 163). How to move from this multilayered/multiscale space utilizing diverse viewpoints of embodiment: taking actions from embodied spaces while holding the space and letting intuition enter the creative process because “space holds the information.” This article seeks to answer these questions and explore the relationship with space, particularly from the perspective of performing art and sculpture.

Keywords: embodying space, sensing space, sculpture, performing art, the space between

¹ “Body-Mind Centering® (BMC®) is an integrated and embodied approach to movement, the body, and consciousness. Developed by Bonnie Bainbridge Cohen, it is an experiential study based on the embodiment and application of anatomical, physiological, psychophysical, and developmental principles, utilizing movement, touch, voice, and mind.” Source: <https://www.bodymindcentering.com/about/>

Introduction

Dance and performing art, in general, is one of the professions or disciplines that deals a lot with space and the body. Through movement, dancers constantly intervene with space and, at the same time, receive information from it. What spectators see is the motion in the outside space, but in embodied performing art, the internal spaces are as important as the outside ones and play a significant role. Even if someone cannot consciously see and name these qualities, they can feel them in their bodies and resonate with the embodied qualities, most probably unconsciously, whether we speak about live performance or “choreographic moving image.”²

As I write this text, I am in dialogue with two practitioners and thinkers, namely with Robert Morris³ sculptor and Bonnie Bainbridge Cohen⁴ somatic pioneer, through their texts, while I am also in real-time reciprocal dialogues with friends, colleagues, artists, somatic practitioners from Hungary and Europe. “The 1970s have produced a lot of work in which space is strongly emphasized in one way or another”—writes Morris in the first paragraph of *The Present Tense of Space* (1995). The same 1970s was the time when the first boom in somatics occurred, and when Thomas Hanna invented the term itself, ‘somatics’ (1976) to “describe and unify these processes under one rubric” (Eddy, 2009, p. 7). Somatic practice is about embodied presence and awareness, and it feeds not only into the dance and performance art world, but into other art fields, design, and further disciplines. In this article, I focus on ways to embody space, and artworks in *real* space (e.g. sculptures, performances, installations). The examples I am citing in this text are primarily, but not exclusively, from two sources: artworks from artists living and working in the Eastern-European region and Hungary, and/or works from artists with Body-Mind Centering® somatic background. These are works that I had a chance to meet with and experience.

Space as Concept, Space as Notion

Space is a scale.

Space is a difference in density.

Space is relation.

² Term invented by Réka Szűcs, in her doctoral dissertation; *On Choreographic Moving Images*, SZFE, 2016.

³ U.S.; 1931–2018; sculptor; “one of the defining voices in the first wave of American Minimalism” (Laermans, 2015). Among other musicians and visual artists, for example, John Cage, Robert Dunn, and Robert Rauschenberg, Morris also collaborated with Judson Dance Theatre (1962–1964), the iconic group, marking the beginnings of contemporary dance.

⁴ U.S.; born in 1941; movement artist, researcher, educator, and therapist and the developer of Body-Mind Centering® somatic school.

Space and its boundaries—meeting
through the surface.
Trespass.

—Bernadett Jobbágy

Space of the Mind, Space in the Mind, Mind of the Space

You are standing still. With a breath in, the hands rise and open to the sides, hugging your front space. You bring them closely together in front of your forehead. You stand with relatively straight arms, relaxed. Palms are not touching; you can see through the corridor that they create. What is needed is a strong but narrow focus, accompanied by this hand gesture and a feeling of compression or condensing in the head. Holding the breath—a little pause. Then, while letting the breath out, you softly open the arms sideways upwards and let this condensed feeling spread with the movement—let it expand, open in all directions. With this gentle exhale, guide your arms back down to the outside of the thigh. Feel the sensation of spaciousness enveloping you and permeating your whole body. You can repeat it a few times. If giving attention to breathing is too much, stop focusing on that and keep moving with the compression of the space in front of you and inside and the expansion of the space in and around. It is a physical sensation, a tightening, thickening, condensing in the middle of the brain, then with the opening arms, a 3-dimensional opening, softening, expanding towards the skull and beyond into the space around. Far away. Later, with the hands going down, a sensation of softening in the body from top to down.

Letting the space flow on and around myself.—Is this the space of the mind? I don't want to narrow it down this much.

As I am trying to write down precisely what I do, *what*, *how*, and *where* I feel, I repeat the action, and words come out of my experience. Your felt experience will be your truth. This principle is there in the somatic work and every encounter with art. As art critic Barbara Rose said about Robert Morris's *Glass Labyrinth* in a public talk in 2014: "That is genuinely democratic, in the sense that you have your experience there. It is not his experience, it is not my experience, it is your own experience." (Titusvideo, 2021; The Nelson–Atkins Museum of Art, 2014). This is also about embodiment: it is always personal, besides any similarities or resonance. You have to own your experience.

We have narrow or wide spaces in our minds and can have space between our thoughts. There is space (time) before the response and space (time) between action and reaction. When we are able to just receive information without either actively going for it or acting

upon it, we are “sitting in the synapse” (Bainbridge Cohen, 2013). She continues, “nerves communicate with each other through spaces between them called synapses,” (2013) and that is a physical space in the nervous system. This goes fast; however, embodying the space in the synapse gives one a wider range of choices. A place from where you can go in multiple directions, not just one familiar way.

A space, where something belongs to, a space that something inhibits, a space which lives inside of something, and the space which is unfolding. The space which is in transformation, and space that informs.

We need distance from ourselves, in order to let go. Space to see the larger picture.

The Emptiness

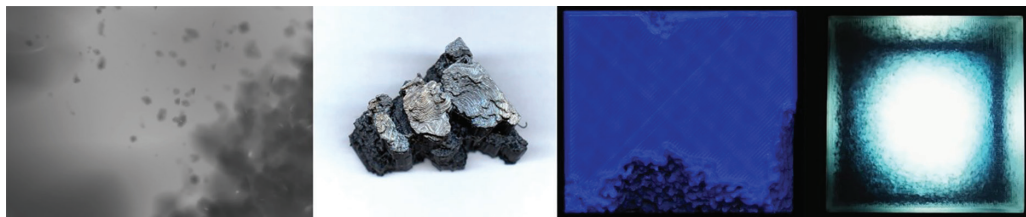
One of the explanations given by the Cambridge Dictionary of space is “an empty area,” and it is easy to feel and understand space with a sense of emptiness: something about levitation, dilation, expansion, and sparseness. However, space is not empty. Nevertheless, density plays a role in differentiating space and object: there is a mostly denser *substance* or *matter*—the boundaries of space and/or the *objects* within it—and there is what we feel as *space* itself, which is mostly lighter, sparser and has a different quality than the substance. It can be air-filled, fluid-filled, denser, or very sparse, but never empty—even though it may feel so sometimes.

In his art project *1/0*, Zoltán Vadászi is questioning objective reality by reflecting on the physical reality experience through the processes that take place inside the human mind. For the series of *1/0* (see fig. 1), Vadászi uses medical imaging modalities (e.g., CT, MRI, Ultra Sound) in an indirect way and—as he mentions on his website—he scans “abstract[s] of pre-defined physically not presented air entities in 3D, functioning as objective reality fragments.”⁵ He visualizes these DICOM (Digital Imaging and COmmunications in Medicine) elements as photographs or video loops, and also creates 3D objects, using different printing techniques. As Vadászi explains, these scanned air entities, as during the scan process everything is continuously changing, reflect onto the superposition—onto “the presence of non-perceptible realities by representing the complexity of decision-making situations.” His artwork also speaks about the perception of emptiness and space and shows that what we may perceive as empty is so much not.

⁵ <https://www.zoltanvadaszi.com/1-0>

Figure 1

Images of 1/0 by Zoltán Vadászi



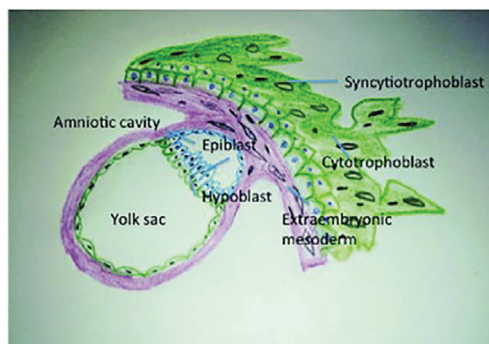
Space, Structure and Fluids

We need both space and matter, emptiness and substance just like activation and resting, experience and digestion, challenge (stimuli), and comfort (safety, base, home, etc.). One without the other does not work properly.⁶ I need to reach out for external impulses, to meet the outside, after I need to go back and inward, to digest. Belonging similarly together, the communication and interaction between space and matter, flow and structure are there from the very beginning of our embryological life.

From the beginning, as the *one cell being* starts to multiply after conception, we immediately start to create our support system. At the blastocyst stage, we already have a differentiated structure of Trophoblast and Embryoblast. Trophoblast after further differentiation will develop supporting structures of the embryo (extraembryonic mesoderm and even the later placenta). Embryoblast will develop the spaces of Yolk sac, and Amniotic cavity with the two-layered Embryonic disc on the meeting surface (see fig. 2). These two layers of cells will be the place where our actual body starts to develop. So, we create, and we are both space and substance, space and structure. It presents a purely relational situation, a dialogue. We need the one for the other as a reference. Furthermore, as there is *substance* in *space* (see Vadászi, 1/0), so there is *space* in the *substance*.

Figure 2

Bilaminar embryonic disc at 14 days in the implantation site in endometrium (Chakrabarti & Sharma, 2018)



⁶ With somatic practice and also through my art, I try to go far beyond this kind of dualism or dichotomy, still, I use these opposites here for an easier explanation and understanding.

The architect and urbanist Tamás Meggyesi writes in his book, *A Külső tér* [The outside space], that contrary to the classic container analogy, where space is what the container encloses, we feel that the container itself is part of the space (Meggyesi, 2004, p. 33). In other words, we are shaping not only the inside but the outside space as well while containing space within itself (e.g., window niche, spaces within the building blocks).

The first space(s) we experience and create in our journey on Earth is (are) fluid-filled. The environment of the cell—internal and external—is a fluid space: an alive space that expands and condenses simultaneously, where nutrients and by-products are transported in fluids. From the moment of conception, we start to create fluid-filled spaces and structures. This very early space is already in transformation, and as we grow, the overall container, the womb, becomes gradually small. With birth, we arrive in the air-filled space and start to experience gravitational force the way we feel it now when reading this text. From this point on, skin, and mucous membrane, are the border between the fluid-filled inner spaces and the air-filled outer spaces.

How Space Feels?

The way spaces feel, the sound and smell of these places, has equal weight to the way things look. (Holl, 2005, as cited in Pallasmaa, 2005)

This ability to sense and feel, and to base actions upon these felt qualities is one of the powers of being human—not only humans do so. Being aware of that or not, we are affected by this felt quality of space and the spatial arrangement.⁷ According to McCormack:

The relation between moving bodies and spaces is more than physical because it is always more than a relation between two discrete things: it is a relation between things already in process. [...] Certainly, space is not reducible to the status of a passive, three-dimensional container within which the intentional action of an embodied, moving subject unfolds. Space, in other words, is never a backdrop for something more dynamic. (2013, p. 2)

⁷ An example comes to my mind from an educational situation: I studied film editing during the pandemic, and it became professionally and emotionally hard, as it was poisoned by the experience of loss in many ways. After the end of the course, on the celebration of receiving our certificates, the team of teachers tried to dissolve unpleasant experiences, so as to get closer to one another as future colleagues. This effort failed, and among the reasons, one significant circumstance was the spatial arrangement of the room. Somewhere in the middle, there was a row of tables strung in a straight line, with chairs behind them, facing to the entrance door. Opposite, in front of the door, there were chairs in an irregular semi-circle, some in two rows, some as a single row. It could be guessed that the teachers sit behind the desk, and we had to sit “unarmoured” on the chairs without even armrests. The whole experience felt rather like a court interrogation than a symbolic act of being made a colleague, which led to an event that worsened the situation.

We have the capacity to feel space itself and be affected by its quality. Often space and places inspire certain pieces of art to be born, or significantly modify the process of becoming.

Scale and the Body as Reference

As for many artists and theoreticians, my reference point in the scale continuum between macro and micro is the human body. Morris claims “in the perception of relative size the human body enters into the total continuum of sizes and establishes itself as a constant on that scale. One knows immediately what is smaller and what is larger than himself” (1966b, 2nd para.). Morris works in space with and through objects, and on his scale, the reference is rather the relationship between the object and the human body. The object can be smaller than the body—we can hold it in hand, we surround it; it can be around the size of the body or a little bigger—the viewer still should be able to perceive it as a whole—that is the *sculptural space* in his understanding; or larger—so it is not possible to perceive the whole object from a single point—the object surrounds us. “At the extreme end of the size range are works on a monumental scale. Often these have a quasi-architectural focus: they can be walked through or looked up at” (Morris, 1967). As a choreographer, I am working with and through the moving body, or bodies, unfolding in space and time, so for me, the body itself is the reference, even when I speak of space. The body relates to space and relates to another body or object through space. The performer’s body also relates to the audience’s bodies and the other way around. The dialogue with *space* is happening towards the *inside space* and towards the *outside space*, pretty much at the same time, and the skin lays there, as boundary and borderland.

The skin itself consists of different layers, which come from different embryological origins: the superficial layer, epidermis, originates from the ectoderm, and the deeper layers—dermis and hypodermis or subcutaneous layer—originate from the mesoderm (mesenchyme). Therefore, the skin is a meeting of layers that orient us both towards the outside world and the inside world. Spaces are related to each other and are also within or around each other. Space is like onion leaves, or the Matryoshka Doll, which denotes a recognizable relationship between ‘object-within-similar-object’ and the relationship of ‘space-within-(similar)space.’ For me as a choreographer and movement educator, the spaces close to the body, and even within the body, have an absolute relevance in the creation process and in the way I think of the perception of the work. Meanwhile, visible movement happens in the kinesphere, the space around the body, or the outside space, and there is a constant dialogue with the inside spaces. Furthermore, the inside spaces may be where the movement is initiated.

The Outside

I am lying down. Lying down and grow.
I feel the coolness of the floor,
and I feel as past my body,
the micro distances glide by.⁸

—Bernadett Jobbágy

If the body is the reference point in the space continuum, the spaces outside the skin are the outer spaces, and the spaces inside the skin are the inner spaces on this scale. The dancer and theoretician Rudolf Lábán (Rudolf von Laban) worked with this outside space in a structured way. During the first half of the 20th century, he created his theories based on the space-time-force trinity of the movements. He related human movements to geometrical forms and

built constructions based on the Platonic solids. [...] The icosahedron was the polyhedron most used by Laban and, in the field of dance, is often referred to as 'Laban icosahedron' (see fig. 3). Photographs of dancers, practicing and performing inside an icosahedron, date back to the second decade of the XX century (Bertol, 2015)

—before Robert Morris, Bonnie Bainbridge Cohen, and most pioneers of postmodern and contemporary dance or dancefilm were born.

Laban, among other things, also invented the notion of Kinesphere, which is “the sphere around the body whose periphery can be reached by easily extended limbs without stepping

away from that place which is the point of support when standing on one foot” (Laban, 1966). “This spherical space around our body shifts as soon as we shift our weight. It is also the first area of movement exploration before going into ‘space in general’” (Thiriot, n.d.).

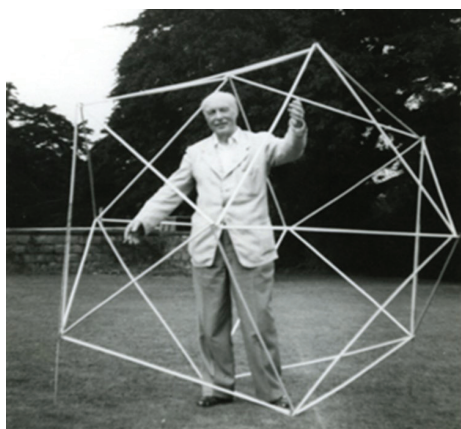


Figure 3

Image of Rudolf Laban
in icosahedron from 1955
(Bertol, 2015)

⁸ The poem originally written in Hungarian by the author, in 2002. In original language: “Fekszem. Fekszem, és nővök./ Érzem a padló hűvösét,/ és érzem, ahogy suhannak testem mellett/ a mikron-nyi távolságok.”

Mátyás Fusz, with his recent sculptures, is also addressing the spaces close to the body, the spaces connected to the skin—but a special part of these spaces: the hidden ones. Fusz, on the one hand, reflects on the “representation of reality,” and “the question of reality as a common language,”⁹ on the other hand, he deals with the subjectivity of vision: how we perceive the world, each other, and the objects in it. His works depict “the grey zones of perception and space that subconsciously affect our daily lives [...] the sparsely perceptible details of space that hide from us in our own bodies, in the bodies of others, or in the world.”¹⁰ Therefore, similarly to Vadász’s work, *1/0*—Fusz transcribes the unseen space visible. He manifests something which is hidden, and in the case of his works *My father was not a glassmaker*, *Rückenkopf* (see fig. 4) and *Dead Space Shield* these are the invisible parts of space, the “perspectival shadows and dead spaces,”¹¹ which are out of the body, but also touching the skin. József Mélyi (2002) art historian poses the same question of how the artist can present the forms of his own body that he hides from himself when viewed from a certain point; and continues by wondering how the part of an object, a living being or a space that is hidden from the viewer’s eye from one angle can become visible, and also wonders about the way a 360-degree view or a tour of a room/a city be perceived in a single object or a series of objects.

Figure 4

Works of Mátyás Fusz. Left: *Rückenkopf*; right: *My father was not a glassmaker*.



⁹ <https://www.leopoldbloomaward.com/nominees/2023>

¹⁰ <https://www.fuszmatyas.com/myfather>

¹¹ <https://kisterem.hu/exhibitions/ruckenkopf/>

Intimacy and Publicness

Fusz's sculptures have a certain intimacy because of their closeness to the skin, even if their size is beyond or on the edge of the *intimate mode*, according to Morris, as he writes about scale: "[t]he quality of intimacy is attached to an object in a fairly direct proportion as its size diminishes in relation to oneself. The quality of publicness is attached in proportion as the size increases in relation to oneself" (Morris, 1966b). For him, "the intimate mode is essentially closed, spaceless, compressed, and exclusive" (Morris, 1966b) as in this case the subject, the viewer, is embedding the object. On the other end of his scale, if the space is on the architectural scale, the object is embedding the viewer; they do not have their own space but coexist. "In the first case, one surrounds, in the second, one is surrounded" (Morris, 1995, p. 182). Morris considers space larger than or of human size but smaller than the architectural scale as sculptural space. It is the scale, where the object–subject relationship can be maintained.

In performing art, especially live performance, the scale is similar to the *sculptural space*, and the relationship between the performer(s) and the audience is maintained. The situation is unique, though in contemporary dance, more and more often, the performer enters the *kinesphere* (personal space) of the viewer, or vice versa; therefore, they are in an intimate closeness. At the other extreme, while the size and scale of stages widely vary, it is also unique to have a dance or theatre performance on the *architectural scale*. While the size and the atmosphere of the space are part of the overall action, the scale of intimacy differs from Morris's sculptural reading. In a performative situation, the scale starts from where a body-to-body relationship is interpreted because of the difference between a chamber performance—something in an intimate and/or small space—and a performance in a large theatre hall. Such elements as the distance between the performers and the audience—the smell of their bodies or the wind their movements stir up; the acoustic characteristic connected to the scale of space; and also, the number of people who view the performance become part of our experience and also create or modify the feeling of intimacy or publicness.

The place of a performance is always a public space, at least for the time of the event (or semi-public because you have to pay to enter). Yet there is a difference between indoor and outdoor performances on stage or in a specific location. There are so-called environmental performances in which the chosen space of the performance is an even stronger part of the artistic vision and a defining part of the piece. These environmental performances can be either site-adapted, like *Légszükséglet* [Urgent Need to Breathe] by Ziggurat Project (fig. 5), when the already performed choreography was adapted

to an empty pool,¹² or site-specific, like Anja Gysin's *HOFFNUNG* [HOPE] (fig. 6) where the performance (or *dance installation*, as the artist calls) is imagined into that specific site. Gysin's work is not only site-specific but also time-specific. Anja Gysin is a choreographer and somatic movement educator with Body-Mind Centering® background who creates embodied performances in nature. The work *HOPE* was placed in nature and timed for dawn, so the growing natural light was an integral part of the performance. At the end of the piece, the performers offered coffee and tea to the audience, as part of the event, therefore, the smell and warmth of the fresh drinks were part of the experience (Kanton Solothurn, 2021). In such artistic choices, the audience is invited to connect to the place itself, while being in the real space. The intention of the shared moment is honest and, in a way, more 'real' than in traditional theatre performances. That is one way to embody space—to be with it. Such a performance is an intimate one, besides the scale and openness of the site.

Figure 5

Environmental performances

Urgent Need to Breathe (Légszükséglet, 2018)



Photo: Attila Balogh.

Figure 6

Environmental performances

Hope (Anya, n.d.)



Another direction is that of the private places. Numerous theatre, dance, or music performances are placed in private properties, in many cases in the creator's home. This *residential theatre* form directly addresses the *quality of intimacy*—even though the scale of the space is again beyond what Morris calls intimate—the scale on which the body surrounds the object.

¹² "The piece was inspired by free-diving. In the performance, we breathe together, but at the same time, our deep breaths focus our attention on our own bodies and spirits. We dive into space together."—says the synopsis of the piece. Its premiere in 2018 was in a theatre space—although already not in a classic black box situation. In line with the original idea, the piece was later adapted to the space of an abandoned swimming pool. In both versions, the space of the audience and the space of the performers overlap and meet each other. <http://zigguratproject.com/projektek#/legszyukseglet-teradaptalt-verzio/>

In Budapest, this form dates back to 1972, when the Kassák House Studio's production, entitled *The Murder in the Skanzen* was banned, so the company could only continue its activities in the private apartment of Péter Halász and Anna Koós, at Dohány Street. At that time the private home as a protected space, as the sanctity of the private sphere, was a political refuge and a necessity. Today it is more of an economic constraint or a play with the privateness and publicness of space. However, it may again be an effect of recent cultural policy processes, of which the independent scene is one of the most vulnerable actors. Some examples of this form in the contemporary dance scene in Budapest are *MAJDHALESZIDOM* [WHENI'LLHAVETIME] (2018) by Anna Réti (fig. 7), also *IITTHONN* [Here at Home] (2019), and *OOTTHOONN* [At Home] (2023) by Dávid Somló and Imre Vass.

Figure 7

Residential performance. Anna Réti: *WHENI'LLHAVETIME*
(Réti, n.d.)



Photo: Máté Lukács.

The intimacy in these cases comes from the fact that we are in a personal space and that the number of audiences is limited. The space itself is smaller than a usual performance venue, and how to get there and enter already requires a personal interaction between the artist and the beholder. We might see small details, like close-ups in a film, which again gives the feeling of closeness and intimacy. Similarly to being invited to someone's home, it feels different to see a performance in the space (venue) of the company from seeing the same piece somewhere else on a theatre stage. Somehow, there is an additional quality when we enter someone's space compared to when the work is staged out of it, somewhere where the performers and the audience are both strangers.

Embodied Reality of Space

"One of the conditions of knowing an object is supplied by the sensing of the gravitational force acting upon it in actual space. That is, space with three, not two coordinates" (Morris, 1966a). Gravity is one of the basic and general forces acting upon us, so it is a key element in embodying space because it offers a very physical sensation of reality, the existence of the body on Earth with its weight and presence. At the beginning of the 20th century, new dance trends liberated the body from previous forms—ballet in a way a complete illusion of weightlessness—and let gravitational force become visible in dance. Poetically, "Merleau-Ponty suggests that the body is not only a settlement for the mind, but it is the center of gravity for human's existence in the universe" (Ghahramani et al, 2014). Contact Improvisation (CI) technique developed out of the exploration of the human body, in relationship to others' bodies and gravity. This open-source (not trademarked) form of improvised partner dance roots back to 1972 and credited mainly to Steven Paxton. It's definition can be found in Contact Quarterly by Steve Paxton, Nancy Stark Smith, and Lisa Nelson as: two bodies create a singular one through a point of contact (i.e., back to wrist, shoulder to thigh, head to foot, back to back) so they can share the weight equally between themselves and then create a movement dialogue that can last as long as both of them are completely engaged in it. Therefore, it is about the weight exchange with the other person and a dialogue with the floor and space. Moreover, dancers are aware not only of their individual center of gravity but also of the center of gravity of the dance itself, in the duo/trio. Today, Contact Improvisation is an essential part of the curriculum in every dance school, and is also used in actors' training, or in a coaching context. Becoming aware of weight, gravity, and space is fundamental in performing arts, but also to feel the embodiedness of our physical reality. Therefore, another way of embodying space is through working with gravity and anti-gravity—relating to earth and heaven—, and to 'horizons' as it is the field of connections. This entails sensing, feeling, and acting upon the weight of the body, or being pulled by the space around.

"Most of us walk around in a split universe, the sensorial one in which the sun rises, and the rational one in which the earth turns"—writes Steve Paxton in his book *Gravity* (2018, p. 41). In physics, gravity is a fundamental interaction that causes mutual attraction between all bodies with mass or energy. This is such a strong force upon our bodies that we feel it is stronger than the centrifugal force by the turning of the planet. We feel *up* and *down*, but it is a subjective sensation. *Down* is towards the center of gravity, which in the case of the Earth–body relationship is practically the center of the Earth, and *up* is the away from the center of gravity. Theoretically, each human is being pulled by the Earth, and vice versa. With our minds, we can easily see this, if we imagine people standing

on the ground in different spots of the globe. Each of them feels the same subjective and relative *down* towards the earth and *up* towards the sky, but the objective directions are towards the center of the Earth or away. In other words: “our own individual accesses meet in the center of Earth” (HumanTurn, 2020, 01:27). This also may give a sensation of connectedness with each one of us.

Space and the Senses

This gravitational force is registered in the inner ear, in the labyrinthine system, and also in every cell of the body. Perception of touch, proprioception together with the vestibular system is the first sense to develop and underly the development of other senses (Bainbridge Cohen, 2005). Later, the development of our movement toward space is supported by all senses—the taste and smell orient us in the near space,¹³ while hearing and vision connects to the space further away. Based on and supported by the senses, our reflexes develop:

primitive reflexes, righting reactions and equilibrium responses are a continuum of automatic patterns of movement that underlines our volitional movement. These patterns develop in response to the interaction between our internal state of being and gravity, other people and space. (Bainbridge Cohen, 2012, p. 124. originally published in *Contact Quarterly* (14)2, 1989)

Being on Earth underneath holding our weight, with the air-filled space around is not only a basic realm that we cannot ignore or escape from, but also a basic experience we all share.

What the Body Remembers

This quoted dialogue between Bonnie Bainbridge Cohen and Nancy Stark Smith is far too long for a “normal academic paper,” but here I wish to have space for it in its wholeness:

NANCY: In Contact [Contact Improvisation, or CI—the author], in terms of head righting reaction, one stimulates a kind of spatial disorientation (along with a more spherical sense of space) by letting the head feel its own weight and move around on the spine, not always keeping it on top but looking at things sideways, etc. It is a key in how

¹³ Newborns have an amazing ability to locate their mother’s breast, which ability is strongly supported by sensory cues, especially smell, which is highly developed in newborns. Some animals are adapted to olfaction much more than humans. For them, olfaction is maybe like vision is for us in navigation. In animals and in humans too, our sense of smell is also tied to memory and to memory of a place (Poo and colleagues, 2022).

people are dancing. A lot of things seem to kick in when people can move with their heads in different relation to their spines and to gravity. I've experienced differences too between just letting my head be a weight and using it spatially like a limb, which really seems to open imagination.

BONNIE: What you are describing is letting go of the head righting reactions, which are controlled at the midbrain level, and not very imaginative, in the sense that head righting is kind of a one-response: the head always stays vertical in relationship to gravity no matter what the rest of your body is doing. Staying in the righting reaction, not experimenting, might be an example of the 'there is only one correct way' attitude.

I feel what happens when you just let your head go heavy is that you're actually going below the righting reactions, you are trapping into even lower responses. So in a certain way you're more primitive and have even less choices because you don't have any response except for the yielding to gravity [Tonic Lab]¹⁴ which is controlled by the low brain. When this occurs, one loses the enlivening nature of the RRs [Righting Reactions] and the equilibrium responses. In order to come out of that state, one simply has to remember or become aware of these other possibilities.

If you want to go above the RRs to the ERs [Equilibrium Responses], then the head becomes an extremity in its own right, so that it can move into space in the same way that the arms and legs do. I would also say that the tail becomes a limb. With the equilibrium responses you go to forebrain control in which case everything is possible. Using the head as another limb allows more possibilities; it opens up cortical imagination.

NANCY: So you think the imagination is cortical?

BONNIE: I think imagination is the function of cortex. What often happens is we imagine something with the cortex and the cortex also tries to figure out how to do it. I think that is the mistake. The rest of the nervous system can handle how it is done. The function of the cortex is to imagine and then let the rest carry it through. When we internalize a movement pattern, it becomes subcortical and then we are able to open up the cortical, the imagination. We work at all these subcortical levels so that they can efficiently carry out our imaginings, our inspirations. (Bainbridge Cohen, 2012, p. 133, originally published in *Contact Quarterly* (14)2, 1989)

¹⁴ Tonic Labyrinthine Reflex [Tonic Lab] is the one that draws us towards the Earth by increasing the postural tone (a sense of aliveness and weightedness) of the muscles on the underside of the body (Bainbridge Cohen, 2012, p. 127).

Speaking about the process of dance and creation, I'd like to highlight two elements of this conversation. One thing is, reflecting on the last paragraph, that in a learning process, dancers practice movements (choreography or training material) again and again, as many times, that they don't have to *think about it*—that's the moment when they actually learned it, embodied it: the moment from when the body remembers. The pattern is created and already sunk to subcortical levels. What has entered, or *passed into the body* can be recalled in a faster response cycle. It is the way to master any movement-based skill, from drawing to dance, and the way to release higher brain capacity for creative thinking. The other thing I wish to point out is that in our developmental process, we embody and integrate primitive reflexes, righting reactions, and equilibrium responses, but oftentimes dancers have to unlearn (re-write) some, to make themselves able to do multiple movement patterns and qualities. The head righting reaction is definitely one to unlearn—*letting go*, as Bonnie¹⁵ says, so that the head can drop if we imagine so, or explore space as a limb.

The Inside

With each breath, I am getting in contact with the space outside, and the space inside.

—Walburga Glatz

One possibility is to embody the anatomical structures and spaces that exist in our adult bodies, the containers and contents—for example, the skeletal-muscular cave of the thoracic cavity (container) with the thoracic organs: the lung, heart and the thymus in it (content) with their fluid environments; or embody the muscular chambers of the heart (container) and the fluid flow through them (dynamic content); or to embody the pericardium and the pulmonary sac, and the peri-organ fluid space between them, the motility of the heart and lungs in the visceral joints, etc. That is the embodiment of a physical structure and a physical space: a cavity, an organ, or even the cells. The metaphor of the onion skins or the Matryoshka Doll is present here: one organ that is content in one case, if we zoom in, it becomes the container.

A different possibility is to embody the *sense of space* through working with embryological development because that is “the embodiment of space versus the embodiment of structure” (Bainbridge Cohen, 2012, p. 163). In the embodiment of embryological

¹⁵ In the Body-Mind Centering® community, even in the training programs, people and teachers refer to Bonnie Bainbridge Cohen on her first name, and mostly just notes ‘as Bonnie says.’ She herself is also a very accessible person, with whom I had chance to meet and talk and eat in person. So, in most cases I try to refer correctly to her as ‘Bainbridge Cohen,’ but this informal way feels more appropriate here.

processes, we go through a series of spaces and structures that disappear in our adult bodies but can still inform our movements. Such early spaces are the Yolk Sac and the Amniotic Cavity, for example, or structures like the Notochord or the primary and secondary kidneys.

Working From Inside

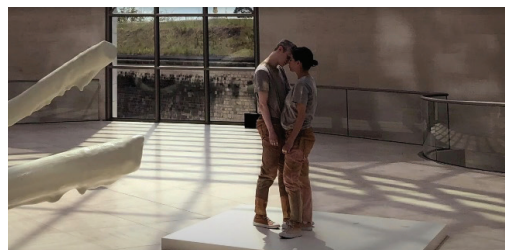
Artists have always been interested in the body, and recently, more and more towards soma (the living body) and the inside spaces of the body. The sculptor Nairy Baghramian speaks beautifully and from a very embodied space about the background of her works:

To take a pose, is in itself a temporary state, that needs the act of releasing to be able to formulate or form the next pose. You need a rest, at least to release the joints. The act between the two poses, that uncertain moment of contemplation captures my full attention. (BOSS, 2020, 00:21–00:47)

She connects the inner structure of the sculptural material with the inside spaces of the human body (fig. 8). That uncertain moment of contemplation she refers to is something Morris calls the *I mode* of the self—from the philosopher George Herbert Mead—in his text *The Present Tense of Space*. I can also relate Baghramian's thoughts to a state of mind that Bonnie Bainbridge Cohen names as sitting in the synapse. This is the pre-required state in performing art, especially working with improvisation or instant creation, and more generally, for being present in any action. Baghramian connects to the material itself: "I have a very classical way of working, a traditional way of thinking of materials to get the sense of the politics of the material, the shape, so I have to be very close. I have to understand it" (BOSS, 2020, 02:40–02:51). That contemporary artistic statement is an embodied philosophy of art.

Figure 8

Stills from the video interview with Nairy Baghramian
(BOSS, 2020)



The dancer and choreographer Zrinka Šimičić Mihanović is inspired by embryological development and transcribes this process into performative action and installation in the physical space. *Dobra voda* [Good Water] is a choreographic work that

starts from an embodied exploration of the history of one's own creation and the relationship between individual versus joint experience. [...] The processes of division, differentiation, transformation, migration, have equally shaped and are shaping the individual body of every one of us, [...] as well as the collective body. (Šimičić Mihanović, n.d.)

In this performative work, the Croatian artist uses a previously prepared paper material as a prop and set design (see fig. 9). The sounds these papers create in the space of the performance while the dancers are moving are as important as the moving bodies. In the choreography, the dancers start as a group close together, covered with the material. They move together, migrate, then move apart, and later come together again. The structure of the work is somewhere between the dance performance and installation: they set up the space, do the performance 2 or 3 times in a loop—the audience can enter and leave at any time—and after the performance is over, the space remains there as an installation. Sometimes, from this point on, the public can experiment with the material and the space. It is a beautiful example not only of using embodied inspiration but also of analog multimedia work.

Figure 9

Dobra voda [Good Water] by Zrinka Šimičić Mihanović



Photo: Jasenko Rasol.

Conclusion

As a dancer and performer, you know the abilities of your body. You know your limits. This knowledge is used consciously, and on purpose—even if we work with improvisation, and trigger intuition in the creative process, or even though often it is hard to speak about it or verbalize what is happening. Indeed, it is not only a cortical way of existing, but when we come to the application and appreciation of this embodied knowledge, it is already on a subcortical level. The framing of a process, and the holding of it, definitely needs cortical presence. The choreographer and director need to be the membrane around the work to keep it together. However, a membrane is also a fluid-filled special space in itself; a container and space at the same time. Staying fluid in the structure, and finding the stability of space, that's what embodied creation offers.

Acknowledgements

The Artistic Research within the framework of the HUFA Doctoral School [2021–2025] is supported by the KDP-2021 Program of the Ministry for Innovation and Technology from the source of the National Research, Development and Innovation Fund.

References

- A Leopold Bloom Képzőművészeti Díj 2023 nyertese: Fusz Mátyás [Winner of the 2023 Leopold Bloom Fine Art Award]. (n.d.) Leopold Bloom Képzőművészeti Díj. <https://www.leopoldbloomaward.com/nominees/2023>
- Anyá (n.d.) MEDIZINTAENZERIN. <https://www.medizintaenzerin.ch/>
- Bainbridge Cohen, B. (2012). *Sensing, feeling and action—The experiential anatomy of Body-Mind Centering®* (3rd ed.). Wesleyan University Press.
- Bainbridge Cohen, B. (2015). Development of Perception, *Senses and Perception 1*. <https://www.bodymindcentering.com/course/senses-and-perception-1/>
- Bainbridge Cohen, B. (n.d.) Educational materials of The School for Body-Mind Centering®, study modules of the Somatic Movement Educator program; Body-Mind Centering Association (BMCA).
- Bertol, D. (2015). Designing and Making a Movement Infrastructure, *Procedia Technology* (20). https://www.researchgate.net/publication/282508288_Designing_and_Making_a_Movement_Infrastructure
- Body-Mind Centering (n.d.) Body-Mind Centering®. <https://www.bodymindcentering.com/about/>
- Bonnie Bainbridge Cohen (2013.01.26) *Sitting in the synapse in the posterior horns of the spinal cord* [Video]. bodymindcentering.com. <https://www.bodymindcentering.com/sitting-in-the-synapse-in-the-posterior-horns-of-the-spinal-cord/>
- BOSS. (2020.10.21) *Introducing Nairy Baghramian: Discover the artists nominated for the HUGO BOSS PRIZE 2020* [Video]. YouTube. <https://youtu.be/1ScHAYTAeLk>

- Chakrabarti, S., & Sharma, N. (2018). Developmental Genetics and Preimplantation Genetic Diagnosis. In Liu Y. (Eds.). *Genetic Diversity and Disease Susceptibility*. https://www.researchgate.net/publication/328345084_Developmental_Genetics_and_Preimplantation_Genetic_Diagnosis <http://doi.org/10.5772/intechopen.77965>
- Eddy, M. (2009). A brief history of somatic practices and dance: Historical development of the field of somatic education and its relationship to dance. *Journal of Dance & Somatic Practices* (1)1. https://www.researchgate.net/publication/249920030_A_Brief_History_of_Somatic_Practices_and_Dance_Historical_Development_of_the_Field_of_Somatic_Education_and_its_Relationship_to_Dance https://doi.org/10.1386/jdsp.1.1.5_1
- Ghahramanim, M. B., Vanak, M. P., Mazaherian, H., Sayyad, A., & Moaddab, E. (2014). Audience embodiment in haptic space of film. *European Online Journal of Natural and Social Sciences* (3)4. https://www.researchgate.net/publication/313130710_Audience_Embodiment_in_Haptic_Space_of_Film
- HumanTurn. (2020.05.09) *HumanTurn / one – hour – turn EN* [Video]. YouTube. <https://youtu.be/xAampyKfvmI?si=IKLDXDV-k8qLjBip>
- Kanton Solothurn. (2021.11.16.) *Anja Gysin, Preis für Tanz 2021* [Video]. YouTube. <https://youtu.be/IEJ3b4wsrjg>
- Laermans, R. (2015). *Moving together—Theorizing and making contemporary dance*. Valiz.
- Légszükséglet [Urgent need to breathe] (2018) Ziggurat Project. <https://zigguratproject.com/legszukseglet/>
- Marks, L. U. (2002). Video haptics and erotics. *Touch: Sensuous theory and multisensuous media*. <https://www.jstor.org/stable/10.5749/j.ctttv5n8>
- Mátyás Fusz: Rückenkopf (2022. 10. 26.–2022. 11. 25.) Kisterem. <https://kisterem.hu/exhibitions/ruckenkopf/>
- McCormack, D. P. (2013). *Refrains for moving bodies—Experience and experiment in affective spaces*. Duke University Press.
- Meggyesi, T. (2004). Külső tér—Fejezetek egy építészeti térelmélethez [Outer space—Chapters for an architectural spatial theory]. *Urbanisztikai Füzetek*. Műegyetemi Kiadó.
- Mélyi, J. (2022). Gerinctaraj [Spinal crest] In Kovács Z. (Eds.). *Élet és Irodalom* (64)44. Irodalom Kft.
- Morris R. (1966a). Notes on sculpture I. *Artforum* (4)6. <https://www.artforum.com/features/notes-on-sculpture-211706/>
- Morris R. (1966b). Notes on sculpture II. *Artforum* (5)2. <https://www.artforum.com/features/notes-on-sculpture-part-2-211590/>
- Morris R. (1967). Notes on sculpture III. *Artforum* (5)10. <https://www.artforum.com/features/notes-on-sculpture-part-3-211320/>
- Morris R. (1969). Notes on sculpture IV. *Artforum* (7)8. <https://www.artforum.com/features/notes-on-sculpture-part-iv-beyond-objects-210825/>
- Morris R. (1995). The Present Tense of Space. In *Continuous project altered daily: The writings of Robert Morris*. MIT Press. <https://koperseminar.pbworks.com/f/Robert+Morris+Present+Tense.pdf>
- My Father was not a glassmaker* (n.d.) Fusz Mátyás. <https://www.fuszmatyas.com/myfather>
- Pallasmaa, J. (2005). *The eyes of the skin: Architecture and the senses* (pp. 6–8). John Wiley & Sons Ltd.

- Partizán. (2023.03.24) "Kozmikus a szar" életútinterjú Tarr Bélával [interview with ENG subs with Béla Tarr] [Video]. YouTube. <https://youtu.be/UhwHzGEYvMs>
- Paxton, S. (2018). *Gravity*. Contredanse Editions.
- Poo, C. and colleagues (2022). *A scent of space—A neural link between smell and space*. HFSP. <https://www.hfsp.org/hfsp-news/scent-space>
- Réti, A. (n.d.). *Majdhaleszidőm*. https://trafo.hu/en/programs/etrafo_majdhaleszidom_enezo_05
- Šimičić Mihanović, Z. (n.d.). *Good Water*. Multimedijalna Koliba. <https://multimedijalnakoliba.hr/en/good-water/>
- Somló Dávid–Vass Imre: OOTTHOONN (n.d.) Trafó. https://trafo.hu/en/additional_programs/performansz_somlo_david_vass_imre_ootthoonn
- Szűcs, R. (2016) *On choreographic moving images—Analytical experiments* [Doctoral thesis]. University of Theatre and Film.
- Szűcs, R. (2019). *Reading the choreographed body*. https://www.academia.edu/99820535/Reading_the_Choreographed_Body?uc-sb-sw=103485557
- The Nelson-Atkins Museum of Art. (2014.07.11) *Robert Morris Talk in Atkins Auditorium* [Video]. Youtube. <https://youtu.be/5JXFY8PM0d4>
- Thiriot, A. G. (n.d.) *Kinetosphere*. Space and relationship—An exploration of and a reflection on Laban's spatial concepts in current dance practice. <https://thespaceintherelationship.wordpress.com/kinesphere/>
- titusvideo (2021.08.22.) *Robert Morris in Conversation with Barbara Rose* [Video]. YouTube. https://youtu.be/a_eDNrbvLzc
- Walburga Glatz — *Physical Philosophy* (n.d.). <http://www.walburgaglatz.com/>
- Zoltán Vadászi: 1/0 (n.d.) Zoltán Vadászi. <https://www.zoltanvadaszi.com/1-0>