## Susan Sentler The Liquid Architecture of Bodily Folding

**Abstract:** Bodily folding, which includes enfolding and unfolding as points of entrance and departure or pathways that change spatial navigation through and with a particular material, matter or substance, could be seen as the baseline state of being within the continuum of action. Biologically, enfolding nurtures the self. It is a form of nest building, a fractal development of an internal structure, a deepening with the self. Unfolding, on the other hand, opens to the world. Unfolding is readiness, structural stability and creative mobility. It's movement beyond the self. In this interview, Susan Sentler, dancer, choreographer and multidisciplinary artist, discusses folding as a cellular, bodily and geological practice as well as a form of somatic intelligibility.

**Natasha Lushetich**: You've been using what you refer to as "folding" in dance improvisation and choreography for some time now. For G.W. Leibniz, the "fold" is not only the matter but also the *grammar* of the universe. It's how the universe moves. Planes and surfaces that were once unimaginably distant in space and time are folded and re-folded together, until they come to form dense territorial, temporal and material configurations we refer to as "the world." Writing three centuries later, Gilles Deleuze and Félix Guattari rearticulate the fold as an *existential refrain*.<sup>1</sup> With its obvious reference to music as a form of temporal and affective organization, an existential refrain is an emplacement, an investment of energy, and a patterning.

In the instructions for the folding sessions you do with Glenna Batson we read:

Looking at the sheet draped over the chair

Lying on the back

Noticing the landscape underneath, folding and reverse folding of the landscape of your own being meeting the floor, the positive space of the contact, the negative space and the continuity of what is behind – what touches and what sequences from the touch to its reverse [...]. Noticing the river across the top of the foot, the flow into the depth of the eye so that each eye finds a deep inner curvature in which to rest the retina, taking the inner self, the part of the brain that sees the world, back into itself, into the gyri of the floating brain, soft, full of deep clefts and inner folding.

<sup>1</sup> Gilles Deleuze and Félix Guattari, *A Thousand Plateaus*, trans. Brian Massumi, (London: Continuum, 2004): 343.

[...] You're a sheet that is shaping but not making shapes, the paradox of something flat and something curved, the emotional binding that speaks of continuity and discontinuity, that tailbone, that spine from its origins, liquid into substance, flat into fullness. Like a dream that finds you, a dream of your deepest unconscious, becoming conscious, surfacing into those folds of the upper part of you [...]. knowing that the fold of the floor is coming to meet you as you come away from it, knowing moments of poise, rest, suspension, ease, letting go, clarity, muddiness. Moments that make sense, moments that support lies in the depth of the crevice, so that at any point you can come into those microtextures of your skin, as if you were looking through a magnifying glass [...] The presence of every cell of the skin of you [...].

How and why do you work with folding in dance?

Susan Sentler: Folding first arose from thoughts prompted by my colleague Glenna Batson. As an aging dancer (both of us, that is), it arose from the need to keep the action of folding alive and liquid, in a deep inner bodily sense. Equally, or even more importantly, virtuosity in dance is often misconstrued. It's often seen through only one kind of lens. But virtuosity can be viewed as more open to detail and to deep subtlety. For me, to continue to discover more possibilities and nurture this sort of virtuosity in dancers I collaborate with choreographically is crucial. Folding is a way in - into the inner body, into kinesthetic consciousness and into the wider field of universal consciousness. It is a particular form of somatic exploration. The post-contemporary dance field is greatly rooted in improvisational practices as well as somatic techniques, such as releasing techniques, contact improvisation and experiential anatomy. What Glenna and I are playing with is a different approach to entering into the somatic-dance interface in new ways heretofore not codified. Our "purposeless purpose," to use John Cage's expression,<sup>2</sup> is to expand not only more bodily possibilities but also to enhance a creative palette of how to negotiate and nest particular qualities for further choreographic use. It's not a means to a choreographic end. Glenna speaks of the importance of exploring modes of "effortless attention." By this is meant embodied attention free of tensions formed from the dancer's life, experience and training. Effortless attention can give rise to deepened access to personal and artistic embodiment. The Human Origami processes (Human Origami is the study of bodily folding, of the biological thrust of pattern-making) find consilience with other disciplines such as biology and embryology, biomedicine, responsive architecture, fashion design, phenomenology and consciousness studies.<sup>3</sup> This is because the folding is always already there at the cellular level. In order for our

<sup>2</sup> John Cage, Silence (Middletown: Wesleyan UP, 1961): 8.

**<sup>3</sup>** Susan Sentler, "About," *Human Origami: The Art & Science of Folded Matter, Movement, Paper, Sound <*http://humanorigami.com/about (acc. 24 April 2019).

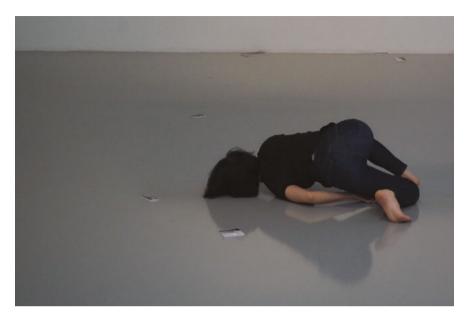
body to grow and develop the folding has to go on. Our first fold, as embryos, is head to heart.

After I began this research, folding was everywhere in my experience. I remember working on my first dance installation in Singapore signs of a nest in 2017 and wanting to use what I refer to as the activity of nesting. As the dancer begins to work continuously, through various avenues of the body, yielding, opening, closing, circling, wayfaring, they come across hidden nested subversive states. These states are transitory hybrids of human, animal and home (as nest). The body is here both an existential prosthesis and an environment. These states are not static, cozy or comforting. They are a fleeting form of belonging everywhere and nowhere; a form of belonging that is abstracted, blurred, hazy, yet clearly recognizable as belonging. The "hidden" part of this state implies gendered context and female embodiment. In contrast to this state of hiddenness, the photographic markers the dancers used to highlight the spot they had visited. in which they had nested, and which accumulated in time were of a male figure resting in an HDB [a Singaporean estate]. The body of the male figure was open, splayed with no sense of vulnerability. The subversive element is located in the hidden working of the nest, which is a simultaneous folding inwards and outwards that includes belonging, accumulating and sedimentation of posture, movement and affect but also departure and abandonment. In each nest, there is a germ of abandonment, of moving on, of oblivion and obliteration. The folding activity became a way to discover, encourage and proliferate new pathways and new resting arrivals.

**NL**: There is something very somatically satisfying about being able to repeat a movement and reproduce a pattern, not as a form of mastery, but as an existential refrain, a spatial and temporal settling into an action that is repeatable and that creates a liquid architecture. In your work, is there a relationship between folding, as you describe it, and stability?

**SS**: Folding is about moving away from the default of stability – that is, a point at which stability implies a fixed space/place. To paraphrase Deleuze, the smallest unit of matter is not the point, but the fold.<sup>4</sup> The fold is constant movement, it never finishes; it never arrives. Folding one's entire body and embodiment – one's entire accrued experience, life, physical, relational and affective inscriptions – is a way of moving away from default, a way of creating new, repeatable but also variable patterns. Something Glenna and I have done a lot

**<sup>4</sup>** Gilles Deleuze, "The Fold Leibnitz and the Baroque: The Pleats of Matter," *Architectural Design Profile* 102: Folding in Architecture (1993): 18–20, 18.



**Fig. 1:** Performative installation work by Susan Sentler *signs of a nest*, dancer Valerie Lim, sound Hajsch, "Fur Cleo 3," from the album 1992 (1992) and "At home" (2016) by Zeekos Perakos, exhibited at ICAS Singapore/SG, 2017, photograph by Susan Sentler.

in our explorations is working with the midline of the body, flipping the up down, left and right and playing around. In a room full of folding dancers (or practitioners of any sort) you would suddenly see movement with no gravity – the landscape of the studio space would change completely, against what you know are invariable physical laws. In the post-session conversations the participants regularly mention losing all sense of up and down. Folding alters your bodily sense of gravity. There are, however, points of departure and arrival – moments of stability within the readiness to move. You have to anchor in before you can go out. I like the word "anchor" and I also like the word "buoy"; the anchor is rooted in the sand, the buoy floats with the current. The juxtaposition of the two works well. The buoy prevents the taking off and losing all connectivity. It's a connection that is barely there. The anchor is stable but it's also unstable. Both the buoy and the anchor are immersed in the landscape of the sea, which is not always tranquil. Besides, it's important to change landscapes, create ruptures, gaps and obstacles, to flip things, change directions and possibilities. This gives you a very minute sense of navigation. You realize that there are so many points of intersection, points in a network of your physical being, where you could take a different turn, head off in a new direction, unfurl another sequence of possibilities. Another way of folding is to focus on the micro-movement of the cellular, or, conversely, to begin with a surface, say, a piece of fabric draped over a chair, for example, and follow the sliding, crumpling, spiraling, coiling. You can fold up, or fold down; or you can fold left, right or diagonally. You can find a resting place and iterate until another fold, another burst of movement takes you in a different direction.

**NL:** It seems to me that this existential relation between space, time and matter – or dynamic – is similar to the old notion of the element. For example, Gaston Bachelard reads fire as the origin of animism because it is the origin of calorism (warmth) and dynamism. Areal experiences have a sense of the future, a vector of flight and, simultaneously, the fall into the abyss. Water is transitory, an ontological metamorphosis between fire and earth. Earth is permanently resistant; it counterbalances the ephemeral aspects of mobility and changeability.<sup>5</sup> And Maurice Merleau-Ponty calls the flesh an element, like fire, air, water and earth.<sup>6</sup>

SS: Folding is certainly a dynamic with countless micro and macro avenues of possibility, like a continuous "what if," which opens up and iterates micropossibilities, going backwards, forwards, up and down, left and right, pausing, and resuming movement with varying velocities. When working with larger groups of people, it's easy to see spontaneous swarming. Without touching or using sight or hearing, people begin to create patterns, then sequences; they move in sync. Folding does have a relationship to the organic world, to things that move and unfold but it also has a relationship to stratigraphy, to the separation of continents with their geological strata and folds. In signs of a nest I worked with the presence of a performing body within a durational installation; the dancers went through folding, enfolding and unfolding until they discovered a hidden subversive nesting state. The female performers would go through a ritual of viewing a continuous series of virtual images, simple unnoticed details that I captured within the public housing landscape in Singapore. The images serve as punctums to trigger a continuous bodily flow,<sup>7</sup> weaving through the architecture of the gallery, until arriving at a still state. The state allowing a duality of reading, one of the body and another of the nest, subject and object becoming one. Folding gets more faceted and deeper at every

**<sup>5</sup>** Gaston Bachelard, *L'air et les songes* (Paris: Librarie José Corti, 1943) and *L'eau et les rêves* (Paris: Librarie José Corti, 1942).

**<sup>6</sup>** Maurice Merleau-Ponty, *The Primacy of Perception*, trans. J. M. Edie (Evanston: Northwestern UP, 1964).

<sup>7</sup> Roland Barthes, *Camera Lucida: Reflections on Photography*, trans. Richard Howard (London: Cape, 1982): 146.

stage – it's a sensibility and an archive of things that could modify, change, expand and connect with other things, events or dynamics. In movement and choreography, iteration is important because of incorporation. You have to incorporate possibilities, situate and re-situate them inside your body. Much of dance artist Rosemary Butcher's work (1947-2016) collapses into what I am doing.<sup>8</sup> In my personal creative process, I incorporate various strategies that I experienced with Butcher. Butcher called these explorations journeys. She worked with bodily imprinting images. She layered images and talked about grids. You begin by placing yourself on the floor, not in a particular place but in a particular way, then you think about the imprint, which is stratigraphic because it doesn't just change the surface, it also changes a number of layers. In a particular journey, we were prompted into an interior of our choice. My first image was the Pantheon in Rome, with the curve, the oculus, and the light. I slipped into that image, my body imprinted, staying in and with the image for a while. Then she would prompt us to reiterate; going back and forward - 'staying in the predicament' - the geography of the room changing. Butcher would also introduce ruptures and gaps, which we would shape-shift into our iterations. We would be supported in our exploration through the density of her textured language mixed with selected soundscapes, which would cradle the space, holding our exploration. You would often stay in these states for two hours, much of it with eyes closed, holding onto the imprint. The imprint is a deep-felt recall, a remembering through layers and layers of existence. This particular exploration was the basis for my 2012 film work *exposed* created through a starting point of light and working with interiors/rooms, predicaments, memory, layers, grids, and gaps. The dancer is transported through explorative improvisational journeys of light falling into four episodes: welling/ piercing in, revealing/exposing, refraction, and deliquescence. A personal abstract voyage is revealed through the rhythmic play of still and moving images.

**NL:** The connection to the build environment is really interesting. In Japanese architecture, space is never static. Space is always movement and interaction capable of receiving *kami* – the spirits – when they descend with their *ki* (the Japanese rendition of *chi*). The moment when space is moved and *becomes time*, the moment of transformation, exists in all traditional Japanese architectural arrangements, for example, *gankō* – the 'flight pattern of wild geese' – which takes the shape of several buildings joined in succession along a diagonal axis.<sup>9</sup>

**<sup>8</sup>** Rosemary Butcher, dance and visual artist, (1947–2016). For more information see *Rosemary Butcher* <a href="http://rosemarybutcher.com">http://rosemarybutcher.com</a>> (acc. 24 April 2019).

<sup>9</sup> Isozaki Arata et. al., Japan-ness in Architecture (Cambridge, MA: MIT P, 2011): 350.



**Fig. 2:** *exposed*, concept/choreography/film/edit Susan Sentler, dancer Irina Baldini, sound C-Schultz & Hajsch from the album *Sonig*, 2012, filmed at Independent Dance London/UK, photograph by Susan Sentler.

The most important thing in this design is that each part of the building preserves its own sense of emplacement, and yet, the entire building and all its parts are clearly and visibly related to a *shifting axis*. Is there a shifting structure in folding? I have noticed that you use different words, such as folding, enfolding and unfolding. Is there a difference?

**SS**: For me, folding, enfolding and unfolding are one and the same but they have a different *point of entrance and departure*; pathways that change spatial navigation through and with a particular material, matter or substance. Folding (without the prefix) could be considered the baseline state of being within the continuum of action. Biologically, enfolding nurtures the self; a sort of building the nest, fractal development of internal structure; deepening with the self. The self comes first, before the reach, signifying yield, safeness, body and attachment. The unfolding opens to the world. Unfolding is readiness, structural stability and creative mobility. It's movement beyond the self. You have to go to the enfolding before you go to the unfolding. *signs of a nest* uses continuous

enfolding with moments of unfolding to generate, slip, and slide into the other. In that work, the priority of the body was to be hidden, to fold into itself, body and habitus becoming one. Folding is everywhere in biology, it's fundamental to nature's way of organizing patterns. It is basic to our human movement repertoire, too. Enfolding and unfolding are the primary psychophysical growth gestures of the embryo from conception through the fetal stage, demonstrating complex organizational principles for spatial efficiency of developing organ systems. Here biology meets geology, but not geography. Geography considers the thing, the material. Geology, on the other hand, is the shaping of things. It's activity. Biology doesn't deal with movement dynamics but with stages. It doesn't deal with the in-between – the between static stages. Yet, these dynamics are key. A geological fold occurs when one or a stack of originally flat and planar surfaces, such as sedimentary strata, are bent or curved as a result of permanent deformation. Synsedimentary folds are folds that arise due to the slumping of sedimentary material before it is lithified. Folds in rocks vary in size from microscopic crinkles to mountain-sized folds. They occur singly as isolated folds and in extensive fold trains of different sizes, on a variety of scales. We engage "in and out," "around and through" these biological and geological landscapes to yield metaphorical stimuli to engage with the body's play within the folding explorations. I am very interested in the in-between spaces; that's where the fold happens. The fold is not stationary; it's moving.

**NL**: How does folding "speak" to thresholds, to somatic geometry and space? For Deleuze, all movement and all consciousness are a "matter of threshold"; the emphasis here is on where the threshold is marked and why.<sup>10</sup>

**SS**: I believe the "thresholds" can be considered as openings, or edges to slip into another possibility. They allow a kind of "non-gravitational" terrain, flipping all sense of what is up and down. Allowing for infinite possibilities of spatial embodiment and creativity, folding is a liminal threshold, the unknown. It's a moment of transition. Liminality affords that space; it surrenders past training, a whole new fragile space, structured and held. It's the opposite of Rudolf Laban's practice. I worked at Trinity Laban Conservatoire of Music and Dance for many years. Laban's work is very much like a network; very linear, point to point, whereas folding feels more like meshwork. Laban doesn't really talk about the in-between; he talks about movement in terms of how you get from A to B, how you travel from one place to another, whether a particular pathway

**<sup>10</sup>** Gilles Deleuze, *The Fold: Leibnitz and the Baroque*, trans. Tom Conley (Minneapolis: U of Minnesota P): 89.

from one part of the body to another, or a greater spatial reference. Laban does not deal with the "how," the specific connectivity that propels you from one place to another. He works with qualities, but doesn't underpin the nature of embodiment which will allow the flow to happen. You can get from A to B in a whole host of ways. Folding is a lot more non-hierarchical – it's not interested in A and B but in the stratigraphy of the semi-known and the unknown, in all the in-betweens, unimportant bits and pieces, microscopic crooks and crevices. Nothing is ever fixed in folding; it's emplaced in a liquid way. Like fractal space; it's structured yet held open. To gain clarity doesn't mean that things have to be fixed. Clarity can be fluid.

NL: Is there a difference between folds and fractals for you?

**SS:** A fractal is a particular structural organization based on reiteration and the rapprochement of the micro and the macro scale but it doesn't allow for as much change as folding. Folding deepens into a fissure until it opens into another, different pathway, transformed consciousness, or potential. There is no sameness; every repetition is always a variation to however small a degree, but the velocity and direction of difference is more pronounced in folding. Glenna and I are trying to move into greater porosity between repetition and variation.

**NL**: What would you say is the relationship between these multiple velocities, directions, shapes and layers and lived and phenomenal time, seen as the interaction between the environment and the somatic self as expressive of past habitualizations and future anticipations, and the "externally viewed" larger-scale amalgamation of these habitualizations and anticipations?

**SS**: We are interested in phenomenal time and in *practicing* lived time, locating where habit lies. We are not interested in chronological time. Phenomenal time is not different from lived time; it's aligned with the lived body; past, present and future intermingle in the unfolding and practice of your own historicity. What's interesting is the formation of habit over time – the ways and points at which habits begin. It's also interesting to look at the earliest imprints, land-scapes that have nested in the body's somatic memory and use them in the layering of new landscapes.

**NL:** Many people, such as Mike Pearson, Constance Classen,<sup>11</sup> hold that the body's earliest impregnations – with the landscape, climate, smells and tastes – calibrate the body in the sense that they determine both the body's reactions to

**<sup>11</sup>** See Mike Pearson, *In Comes I: Performance, Memory, Landscape* (Exeter: Exeter UP, 2006); *A Cultural History of the* Senses, ed. Constance Classen (London: Bloomsbury Academic, 2014).

other landscapes, climates, smells and tastes, and the scale and intensity of those reactions. In your work, do you address the relationship between these inner "maps," the practice of folding, memory and matter, the micro-macro scale, for example, the human body versus the universe? I'm thinking of Henri Bergson here. For Bergson,

the smallest grain of dust is bound up with our entire solar system, drawn along with it in that undivided movement of descent which is materiality itself, so all organized beings, from the humblest to the highest, from the first origins of life to the time in which we are, and in all places as in all times, do but evidence a single impulsion [...] all the living hold together, and all yield to the same tremendous push.<sup>12</sup>

**SS**: Yes. And also, quantum physics aligns with many of these ideas. We are all so used to living at the level of matter. We think that matter is the end point, yet matter is a point of entry. Human Origami, the ongoing research that I share with Glenna Batson, explores how the body folds for movement creation, artistic expression, embodied transformation, sonic exploration, and scientific understanding. Human Origami is not based on the theories of quantum physics, but its processes of exploration recall certain hallmark ideas, such as the indeterminancy of matter and of waves and particles. Theoretical physicist David Bohm's concept of the implicate and explicate order is also relevant here. Implicate and explicate order describes two different frameworks for understanding the same phenomenon or aspect of reality, developed to explain the behavior of subatomic particles. For Bohm, the wholeness of experience is paradoxically fragmented: thought can be experienced as a series of static images, yet, in the actual experience of movement, one senses an unbroken, undivided process of flow, to which the series of static images in thought is related as a series of "still' photographs might be related to the actuality of a speeding car."<sup>13</sup> In practice, we try to create a sensorially rich, liminal environment in which dancers can free themselves of the usual constraints of "doing" movement. Dancers are given the freedom to find how particle can become wave, how the smallest inkling of sensation or tissue can embody multiple movement ramifications.

**NL:** This seems like a process that branches into infinity. Is bodily folding in any way related to death? Does it "think" death? I'm not comparing folding to *butoh* in the aesthetic sense, but do you think that, philosophically speaking,

**<sup>12</sup>** Henri Bergson, *The Creative Evolution*, trans. Arthur Mitchell (New York: Random House, 1911): 295.

<sup>13</sup> David Bohm, Wholeness and the Implicate Order (London: Routledge and Kegan Paul, 1980): xi.



**Fig. 3:** Research exploration held by Glenna Batson and Susan Sentler, dancers Clementine Telesfort and Belinda Papavasiliou, conducted at Trinity Laban Conservatoire of Music and Dance London/UK, 2014, photograph by Susan Sentler.

there is a link with some of Tatsumi Hijikata's ideas such as "We are broken from birth. We are only corpses standing in the shadow of life,"<sup>14</sup> or with dance as a means of summoning unconscious experience, as a medium between the "spirit and impulse" that mirrors the processes of the universe and transforms the dancing body,<sup>15</sup> itself a process and not a substance?

**SS:** I wouldn't use the word "death." When we meet those liminal moments, we say goodbye to enter a new zone. Still points are still but not in a cranial sacral sense. We enter into something new; we leave behind and discard the old skin rebirthing through little births, uneven bursts of growth, not death. It is well known in neonatal neuroscience that the developing brain goes through a sequence of growth events. These include cellular proliferation, synaptic formation

<sup>14</sup> Tatsumi Hijikata quoted in Jean Viala and Nourit Masson-Sekine, *Butoh: Shades of Darkness* (Tokyo: Shufunotomo, 1991): 186–187.

<sup>15</sup> Tatsumi Hijikata, "Inner Material/Material," TDR 44.1 (2000): 36–42.

and then – with experience, especially movement experience at the neonatal stage – a period of "pruning" occurs in which many cells must die (normal *apoptosis*) in order to complete the cycle of development. That is not to say that these early neural networks remain fixed throughout life. Instead, the brain is infinitely *plastic*, forming new synapses with experience. But, what it does speak to is that cellular death is an integral part of normal growth and development.<sup>16</sup> In Human Origami, this concept ironically comes to life in that former fixed movement habits of the body are given a proper "death" with the arrival of new, more flexible and adaptive moves. Thinking in terms of beginnings and ends, motion and staticity is not helpful. Nothing is ever static, frozen, overseeable or entirely graspable. Everything is always in the process of changing; bodily folding affords a very concrete experience of permanent change as liquid architecture, which is vastly different from fixed emplacement that relies on concepts like within, without or even beyond. While being beyond mind in that it cannot be encapsulated in a formula, concept or notion that is shorter, more manageable, and also more graspable than the (long, slow, non-localizable) practice itself, folding, as a liquid architecture, is also the epitome of the embodied, environmentally embedded or extended mind.

**<sup>16</sup>** Adrienne L. Tierney and Charles, A. Nelson III, "Brain development and the role of experience in the early years," *Zero Three* 30.2 (2009): 9–13.