

## **A Sense of Balance: Moving In-between the Vertical and Horizontal Plane**

By Carolien Hermans

When we say ‘we are in balance’ or ‘we are off balance’, we often do not refer to our physical state but to our emotional and mental wellbeing. Balance is frequently associated with terms such as risk and power. We use it as a metaphor for politics, the financial world and social stratification. Despite the wider cultural use of the term balance, it is grounded in our bodies, based on embodied experiences of balance (Fuchs 1). According to Johnson, our embodied experience of balance serves as the grounding of any abstract understanding of what it means ‘to be in balance’ (Núñez et al. 50). Balancing is an activity that we learn from very early on. It is a prerequisite of a whole range of movements



such as rolling, crawling, sitting, standing, walking, running, cycling etc. In fact, all our daily movements are based on our sense of balance, although balance is strictly speaking not one sense but a cross-modal system that includes proprioception, the vestibular system, as well as our tactile, visual and hearing system. It is multisensory, as it requires the collaboration of different bodily systems. The sensation of balance is one that resides deep in our body. Balance is thus first and foremost an embodied experience. However, it is also used as a cultural expression to describe our mental condition and even the state of our world.

In my own artistic work, I explore the dynamics of balance through a range of basic movements such as jumping, falling, rolling, turning, running. According to Sheets-Johnstone such basic movements can be regarded as motivating forces that produce ‘a high, an elevated sense of aliveness, a delight in the kinetic dynamics that is underway’

Figs. 1-7: Author’s photographs of their children (24 April 2017, Lisseuil)..



(416). Movement itself is compelling, as it not only motivates us but also directs our attention. Even more, through physical play we learn ‘the vulnerabilities of being a body—our own vulnerabilities and the vulnerabilities of others in our movement interactions’ (Sheets-Johnstone 412). Through basic bodily movements, we come to know ourselves in a kinetic and kinesthetic way.

With the camera I capture the basic movement repertoire of playing, as well as the more complex movements of professional dancers. I am interested in how affects, forces, and intensities can travel through different bodies and I use the camera to capture these transformational moments. I specifically choose photography and not video, since I am not interested in capturing the whole sequence of movements, but just fragments of it while still being able to follow the whole trajectory of movement.

In the first set of images, we see two children (my children), jumping as high as possible, and landing on a mattress that is placed in the backyard of an old mill somewhere in France. As the mattress provides safety, the children are allowed to take more risk. The mattress in fact is an integral part of the act of jumping. This is also the reason why I decided not to remove the mattress in the post-editing process. I am more interested in the expressiveness of a pose rather than drawing attention to its spectacular nature.

The first set of images can best be described as a collage, since images from different sequences are selected and re-arranged in a loose order. I purposely break up the linear and temporal construction, in order to isolate the different phases of jumping and falling: approach, takeoff, flight, landing, and recovery. It is only because the chain of movements is interrupted, that the narrative of the action is suspended.

The second set of images is taken during a dance improvisation workshop to thirteen first-year dance students of the Amsterdam University of the Arts. As you can see below, I have kept the original order of the sequence. The physical action (the jumping) is re-constructed through a temporal (re-)ordering of the photographs. Meaning arises

in-between the photographs. In other words, the missing photographs are just as important as the existing ones. Absence constitutes presence. The photographic sequence is constituted around perceptual breaks in linear time. The original action has been frayed and dissected until only isolated fragments (images) remain, frozen in time. Then the bits and pieces (the fragments) are put back together—in such a way that a new intrinsic logic and order starts to emerge. As a result, the photographic sequence is not complete, it is fragmentary and remains unfinished. The holes and gaps in the sequential order are very much part of the reconstruction of the action.

With these images I try to capture the body in-between: ‘the body of the almost, when the movement is on the verge, actual but almost virtual, hanging, pulsing, spiralling’ (Manning, in Cooper Albright, *Falling* 40). The in-between that enables us to engage with potentialities, where the self (as a fixed identity) is suspended, in favour of a floating, unstable state of being. The in-between reveals the groundlessness of ourselves. The in-between is a transitional state, a crossing, a no-man’s-land, a fluid zone, an unstable borderland of differences. The in-between is ‘an open space, filled with an atmosphere of suspension and uncertainty, neither this nor that...’ (Fremantle par. 1). The in-between creates passages from the actual to the virtual, thereby opening up a continuum of multiplicities. It enables us to engage with potentialities. In a more literal sense, the in-between is movement that is still on its way. It has not found its definite form yet.

According to Fuchs (2), balance is the ‘ability to control one’s own centre of gravity in relation to the support area in order to maintain an upright posture’. Its function is to control the body’s upright position in space. The organ of balance (the vestibular system) is vital for our sense of balance: it is located in the inner ear, and it is (almost metaphorically) referred to as the labyrinth, with hoses, liquids, pebbles and sensory hairs. Balance is a ‘musical sense’, its signals are transferred in the same area as auditive signals. Distance, direction, space, orientation, height and depth, and rhythm all play a role in balancing. Even more,

balancing is a movement, even if we stand still for a minute on one leg. It is only through movement that we experience a sense of balancing. Balancing is therefore a dynamic act, as we continuously make context-dependent adjustments in order to maintain balance. Walking, for example, is a dynamic act of balancing. From a biomechanical point of view, walking can be divided into four basic tasks: (1) 'to support the body against gravity, (2) to redirect the body's center mass in order to maintain forward motion, (3) to swing the leg forward, and (4) to maintain stability through balance control' (Ijmker 11). Walking is, in a way, controlled falling: you fall forward and you catch yourself in your own fall. Balancing is intrinsically related to falling. To balance is to find the right momentum between falling and catching.



Two systems are at work in order to maintain balance: postural control and equilibrium control (the latter one is often conceived as part of postural control). Postural control is 'the ability to maintain equilibrium by keeping or returning the centre of gravity over its base of support' (Wallmann 436). Postural control is a flexible system that operates on an automatic and pre-reflective level. The postural control system has two functions: 1) to ensure that balance is maintained and 2)



Figs. 8-13: Author's photographs of Alberto Quirico (15 March 2018, Amsterdam University of the Arts).

to provide a stable reference frame for perception, an action (Massion 877). Equilibrium control consists of all the micro-adjustments that are made to compensate for internal and external perturbations in order to keep balance (Ivanenko and Gurfinkel 1).

To fall is to lose balance, to slip over, to be knocked off your feet. Falling confuses our sense of the world's order (*How To Land* 18-19). Falling is disorienting. Falling unsettles our world (Sharrocks

55). We fall from grace, we fall in love, we fall asleep. It happens to me quite a lot. The falling into sleep I mean, or actually, the falling out of sleep. It is called hypnic jerk: the feeling of falling triggered by a sudden involuntary contraction of the muscle twitch. Hypnic jerks typically occur moments before the first stage of sleep. In fact, the hypnic jerk is a sign that the motor system can still exert some control over the body.

Dropping. Surrendering. Releasing. Letting go of the upright position, engaging in the horizontal. The fall: 'any movement of the body as a whole and its segments in the direction of the gravitational force' (Reguli et al. 64). We fall because of imbalance, caused by endogenous or exogenous factors. Falling almost always implies the giving up of our upright position (and indeed this is our dominant Western position), when gravity pulls us downwards, we engage in the horizontal plane. We fall towards the ground. Only in our dreams, we can fall without landing on the ground (since in our dreams we fall and land into our subconscious).

Falling is relational—if there is nothing to fall toward, you may not even be aware that you're falling [...]. As you are falling, your sense of orientation may start to play additional tricks on you. The horizon quivers in a maze of collapsing lines and you may lose any sense of above and below, of before and after, of yourself and your boundaries. Pilots have even reported that free fall can trigger a feeling of confusion between the self and the aircraft. While falling, people may sense themselves as being things, while things may sense that they are people. Traditional modes of seeing and feeling are shattered. Any sense of balance is disrupted. Perspectives are twisted and multiplied. (Steyerl par. 4)

Not only falling, but also balancing is a relational act. Balancing is to find equilibrium between self and environment. Our movements are connected to the movements of the earth, to the movements of

our environment. The earth pulls on all the mass of your body, while your body exerts the same gravitational force on the Earth. We are in constant dialogue with the forces around us. Balancing can thus be seen as a process where we try to maintain our upright position in an ever-changing world. Balance: orientation, control, stability, safety, power, authority, dominance, verticality, the upright position. Off balance: disorientation, confusion, loss, failure, instability, vertigo, dis-ease, unsettling, loss of control, dizziness.

Despite the fact that dizziness and disorientation are unsettling states, there is something luring about dizziness and vertigo. Youngsters especially make all kinds of efforts (spinning around, roller coasters, using drugs) to bring themselves into a state of dizziness, deliberately seeking the moment that the ground slips from under their feet.

Ann Cooper Allbright perceives the fall and being out of balance as the opening up of other possibilities, a state of becoming, a state where you become more-than, and where openings arise in the personal envelopes of singular bodies, where self, space and time are re-organized (*Falling* 40). For Cooper Allbright being off balance is a transitional state. It is a place of uncertainty. It is the suspension between two known points that ‘opens up multiple possibilities and different orientations’ (39). It is here, at this transitional point, where new meanings may emerge.

In the act of falling and regaining balance, we learn about the fragility of our own bodies. Each act of balance is an act of uncertainty, vulnerability and fragility. Indeed, we live in uncertain times with overpopulation, climate crisis, social stratification, political instability and epidemic outbreaks. We, human beings, are losing balance more and more frequently: ‘[l]ife and the world of human experiences are messy, complex, and rarely well balanced’ (Fuchs 8).

Life itself is a process of finding balance, losing balance and finding balance again. We jump, we fly, we fall, we land, and maybe we crash. It is in-between the jumping, the flying, the falling and landing that new potentialities arise, and where endings become beginnings.



## Works Cited

- Cooper Albright, Ann. 'Dwelling in Possibility'. *Taken By Surprise: A Dance Improvisation Reader*. Edited by Ann Cooper Albright and David Gere. Wesleyan UP., 2003. 257-267.
- . 'Falling'. *Performance Research*, vol. 18, no. 4, 2013. 36-41.
- . *How to Land: Finding Ground in an Unstable World*. Oxford UP., 2019.
- Fremantle, Francesca. *Luminous Emptiness: Understanding the Tibetan Book of the Dead*. Shambhala, 2001.
- Fuchs, Dominik. 'Dancing with Gravity—Why the Sense of Balance Is (the) Fundamental'. *Behavioral Sciences*, vol. 8, no. 7, 2018. 1-9.
- Ijmker, Trienke. *Balance control in human walking: an energetic perspective* (PhD Thesis). Vrije Universiteit van Amsterdam, 2015.
- Ivanenko, Yury, and Victor Gurfinkel. 'Human Posture Control'. *Frontiers in Neuroscience*, vol. 12, no. 171, 2018. 1-9.
- Johnson, Mark. *The Body in the Mind*. U. of Chicago P., 1987.
- Massion, Jean. 'Postural Control System'. *Current Opinion in Neurobiology*, vol. 4, no. 6, 1994. 877-887.
- Núñez, Rafael, Laurie Edwards, and João Matos. 'Embodied cognition as grounding for situatedness and context in mathematics education'. *Educational Studies in Mathematics*, vol. 39, no. 1, 1999. 45–65.
- Reguli, Zdenko, et al. 'Questioning the Concept of General Falling Techniques (GFT)'. *Proceedings of the 1st World Congress on Health and Martial Arts in Interdisciplinary Approach*. Edited by Roman Kalina. Archives of Budo, 2015. 63–67.
- Sharrocks, Amy. 'An Anatomy of Falling'. *Performance Research*, vol. 18, no. 4, 2013. 48-55.
- Sheets-Johnstone, Maxime. 'Child's Play: A Multidisciplinary Perspective'. *Human Studies*, vol. 26, no. 1, 2003. 409-430.

- Steyerl, Hito. 'In Free Fall: A Thought Experiment on Vertical Perspective'. *E-flux: Journal*, vol. 24, no. 14, 2011, <https://www.e-flux.com/journal/24/67860/in-free-fall-a-thought-experiment-on-vertical-perspective/>. Accessed November 2020.
- Wallmann, Harvey. 'Physical Matters: The Basics of Balance and Falls'. *Home Health Care Management Practice*, vol. 21, no. 6, 2009. 436-439.