

# Neither Human nor Cyborg: I am a Bitch and a Molecular Swarm.

## Proprioception, Body Intelligence and Microsexual Conviviality

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### **Abstract**

The essay proposes a critique of a dominant model for structuring perception based on a fixed point of vision and stemming from Renaissance perspective, which grounds a sociality based on categorical splits. The essay proposes a new theory of movement and perception grounded on proprioception (the internal sense of movement of the body) linked to a new field-theory of movement. Finally, the essay proposes techniques and improvisation practices to enact modes of relation and sociality grounded on this new account of movement and perception, associated to a co-sensing ethics proposing a series of meta-species, *mestiza*, neurodiverse, microsexual and swarming becomings.

**Keywords:** proprioception, body intelligence, flocking, field theory, movement philosophy, trans-species, post-queer

### **Introduction**

In this paper I propose that a problematic mode of sociality dominates Western, educated, rich societies, and the planet, grounded on categorical splits between subjects, between bodies, and generally founding quantification, segmentation, linearity and all categorical dualisms of man-woman, heterosexual-homosexual, subject-object, mind-body, nature-culture, human-nonhuman, abled-disabled, white-racialized, rich-poor, master-slave, good-evil and order-chaos, amongst others. These splits rely a priori not on ideology or discourse, nor on any universal conditions, but on particular ways of organising perception and movement in terms of strict geometries, a model culminating in Renaissance perspective with the fixed point of vision in relation to a gridded frame. This model, that is still grounding our cameras and screen-based interfaces in digital culture, allows to reduce movement to segments that can be codified, first in strict behavioral patterns and architectures (disciplinary society) and now in dynamic algorithmic modelling (control society).

This model of all-encompassing calculation based on fixed points of vision that reduce the complexity and indeterminacy of movement by continually orienting it, grounds the dominant, rationalistic, Western technologies, ontologies and epistemologies, with roots in Greece, expanding since the Renaissance, through the Enlightenment and Mechanism, and growing exponentially in digital culture. The fixed point of vision of perspective imposes an extreme immobility and atrophy of movement and multisensory integration and allows the measurement and reorientation of movements in digital control culture precisely due to the reduction of movement itself.

Against this model of sociality based on immobility, I propose a new theory of movement and perception that builds upon the sense of proprioception: the internal, muscular-articular sense of movement of the body. Proprioception dissolves all the dichotomies and splits that have been grounded on the fixed point of vision of perspective as it's a highly diffuse and amorphous sensedistributed across all tissues that exposes our radical entanglement with the world, as it is also the site where multisensory integration (the integration of inputs from multiple external and internal senses) comes together, in ever-changing ways, with the body's capacity to move.

This theory of perception relates to a new theory of movement, which is no longer understood as displacement in a given geometric or perspectival space, but as itself a *field*: a human body is like a swarm of 360 joints whose primordial movement is not so much its displacement in a space but its internal changes of proprioception, the internal changes of relations of its limbs and the everchanging combination, not only of our 360 joints (which in only two positions would already give a combinatory of nearly a googol<sup>1</sup>, much more than the number of atoms in the universe) but of all the tissues in-between them, down to cytoskeletons of cells contracting, made of proteins folding, atoms decaying, and quantum fluctuations: a combinatory well beyond the googolplex<sup>2</sup>.

The body is thus a movement field, so is a bacterial colony, a galaxy, an atmospheric phenomenon, a city, a technical system or a flock of birds, emerging bottom up, unfolding from (quantum) fluctuations along the evolutions of the universe. The swarm will be a trope for understanding the variation and diversity of movement fields, their consistency and their openness, in terms of plastic rhythms, changes in orientations and contacts-proximities of the zones of density in fields. The balance between consistency and openness allows evolution to be a creative movement of variation, whereas reduction of openness, as in systems of domination, diminishes the creative movement of evolution.

Finally, I will expand on a number of movement and perception techniques which I develop since 2001, mostly related to my artistic work, but more largely as life *téchnes* or even therapy. These are choral practices and improvisation technologies, crucial for enacting a plastic sense of proprioception, multisensory integration and movement, and for mobilising BI (Body Intelligence) as the swarming self-organising capacity of bodies to move, in the entanglement of proprioceptions. Such practices, which resonate with multiple improvisatory bodily collective and multisensory practices in many cultures including the Dionysian Chorus in ancient Greece, would be cornerstones for a new kind of planetary conviviality which is not grounded on the

multiplications of controlled splits, but on the fluctuating entanglement of bodies emerging bottom up from molecular and proprioceptive relations: literally, a perceptual orgy that takes on the orgiastic movement of bacterial assemblages grounding evolution and from which our sense of body symbiogenetically emerges as both microsexual and meta-species.<sup>3</sup>

These practices are related to an ethics of co-sensing (mutually sensing oneself, each other and the world, in emergent proprioceptive acts of perception), that tries to overcome the limitations of the notion of consent of the human rational adult in the age of autonomous algorithms. This implies claiming a radically symbiotic affectivity that unfolds into a series of becomings: becoming trans-species, *mestiza*, autistic, microsexual (post-queer), all of which converge in the becoming molecular swarm, which is not a metaphoric becoming but an actual becoming happening when modes of movement and perception are enacted that mobilise the swarming intelligence of the body, the swarming power of movement. These becomings enact a new type of metabody (relational and emergent body) while working against reductive alignments of domination.

This kind of conviviality would indeed be post-queer as it would not be grounded on a discursive performative subversion of gender and sexuality norms<sup>4</sup> but on the enaction of molecular modes of composition between bodies that challenge the very condition of possibility of all binary categorisations, namely the fixed point of vision and its precursors and aftermaths, and the logos as linear mode of thinking within other non-linear modes of swarming thinking of the body. Instead of the tendency to reduce movement-perception to linear orientations (imposing atrophy and with it all modes of normativity, control, measurement or categorisation), an irreducibly plastic body is mobilised, post-anatomical and formless, and with it more plastic ecologies and less violent, i.e. more sensitive ways of becoming-with<sup>5</sup> in the Algoricene<sup>6</sup>, the Age of Algorithms.

This could imply opening the Algoricene up towards an *Amorphocene*, of movement consisting in its openness, exceeding and resisting the epochal domination and reduction imposed by form, categorisation, and measurement, an era of irreducible, open yet consistent and sustained bodies-movements that doesn't merely exceed or precede the Algoricene but which enacts new plasticities yet to be accounted for as evolutions across and beyond the Algoricene. At the same time this is not a utopian but a metatopian proposal, a movement politics based on continually sustaining and increasing the openness in movement, while resisting or undoing reductive alignments, and doing it through the subtlest ongoing variation (*clinamen*) in movement.

### **How we move - Plastic realism and creative evolution**

How we move is how we think<sup>7</sup>, feel, know, perceive, relate and collectively create our worlds. The more we align our movements with a reduced set of possibilities, the more rigid our realities. The richer and more plastic our movements, the richer and more plastic our worlds. At the core of our tissues and motion capacities lies a power for endless qualitative variation of movement, a plasticity that however requires techniques for its ongoing elaboration. Our nervous system, tissues and joints have a decentralised,

self-organising capacity for infinitely varied configurations, like do our swarming affects, thoughts, ecologies and cultures. How we move changes the epigenetic expressions of our DNA<sup>8</sup>, our embodied cognitive potentials and our ecosystems.

But for millennia a culture of immobility has conquered the Earth, imposing an extreme reduction on movement. Rooted in an intricate mesh of increasingly geometric alignments, Autonomous Algorithms reorient us in opaque and flexible (but not plastic) networks, in the Algoricene, or Age of Algorithms. In times of multifaceted forms of domination ranging from sovereign and disciplinary<sup>9</sup> power to flexible digital control, which operate aligning and reducing the spectrum of movement and experience, I propose a reverse move towards greater plasticity and richness of movement.

Plasticity, as the capacity for creation, dissolution, resistance and reconfiguration, is the prerequisite of creative evolution<sup>10</sup> and this implies the capacity for behavioral indeterminacy in a fluctuating world. My radical account of plasticity as different from Catherine Malabou's<sup>11</sup> is not a plasticity of form, but beyond form, since form is related to perspective and proprioception is significantly formless: It allows to think the *consistency of the formless*, where rhythm (rather than form) is not a pattern but a plastic differential defining both a field's *consistency* and its *openness*.

My proposal is about life and evolution as the *movement of variation emerging in the metastable balance of consistency and openness* that comes about as the universe unfolds from fluctuations. The ontological primary of the world is neither being nor nothingness, but indeterminate (quantum) fluctuation<sup>12</sup>, as indeterminate variations of energy-density unfolding in/as fields, so that the universe itself, and evolution as well, including our sense of proprioception, is an unfolding of fluctuations. From pre-Big Bang quantum fluctuations, atomic and galactic swarms, through geophysical and molecular, proteinic and bacterial swarms, to nervous systems, affects, ecosystems and societies: We and our worlds are metastable, fluctuating fields, metabodies varying in the dance of consistency and openness, emerging bottom up over 14 billion years of non-linear evolutions, or n-evolutions.

The subtle balance between indeterminacy and consistency is the ground of life and evolution as diversification, or in other words, when certain fields consist and persist within fluctuations, it cannot but be in a movement of variation or else the primary fluctuation would be stopped, though occasionally folds within fluctuations create local conditions for almost stillness, blocking the creative movement of evolution. This variation entails increasing complexity and diversification due to the way in which it is not bounded but proliferates in novel fields co-emerging with other fields, in always new movements: not of separation but of relation and reciprocal mutation, attunement and tuning. From cosmic strings to our proprioceptive muscular tone, fluctuating fields reattune across each other, fluctuating swarms of oscillations, in a chaotic micropoliphony of resonances.

But sometimes (often, but not always) the field's sustained indeterminacy, creativity and plasticity gets reduced. The balance between indeterminacy and consistency affords the conditions for the move towards increasing diversification and richness, but movement can get excessively aligned or can also lack consistency. Fields are Open Wholes and their closure works against creative evolution, when excessive

consistency takes over at the expense of openness. Domination, being also an occasional expression of fluctuations, always implies a reduction and works against the creative movement of fluctuation itself.

Over millenia gridded geometries have gradually conformed the frozen swarm of imperial (Western) cultures, imposing their ratios on the planet and beyond, culminating in the fixed point of vision of perspective, in mechanism and disciplinary society<sup>13</sup>. The grid, a hazardous evolutionary mechanism emerging perhaps with rectangular nervous connections, has externalised itself composing an entire world of gridded relations<sup>14</sup>. With the onset of Cybernetics after WWII a new inflexion of this geometric field or swarm into dynamic modes of organization unleashes the stratum of control societies. Along this expansion the biodiversity emerging over four billion years of swarming molecular evolution is being put under extreme pressure and danger of annihilation in a process of just a few centuries, a destruction that I intrinsically relate to the reductive character of *dominant* human technics and modes of organisation.

The only excuse that the dominant human subject has put forward for this destruction is the placing of itself above that which it destroys or enslaves, but this pretension of autonomy and superiority has proven to be a destructive chimera that conceals a process of planetary and self-annihilation, already expanding in the nihilistic search for exoplanets to which to migrate after destroying this one. *I propose to think instead the radical evolutive inferiority of domination and reduction, and the need to sustain indeterminacy or openness in creative evolution.*

Algorithms are the ultimate paradigm of reduction of movement to segments that can be endlessly recodified within highly gridded architectures, from textiles and looms, streets, perspective, frames, cameras and screens to microchips: a false and problematic dynamism. Superaligned swarms of algorithms choreograph our worlds in planetary scale computations systems aiming at total control dystopias. But this reduction relies on particular, millennia-old geometries and infrastructures that have been increasingly narrowing and orienting perception. Dynamic algorithms are still grounded on millennia-old geometric environments, now screen-based interfaces, data centres, hard-drives, cable and satellite networks, microchips, code, and so forth, that choreograph binary signals and with them movement-perception.

Narrowness of movement and perception is narrowness of cognitive-affective richness, we have created a seeming global connectivity at the expense of narrowing down our experience and this is not sustainable, we need to restore a balance. Movement remains irreducible as long as we sustain and expand its bottom up swarming power. In times of AI (Artificial Intelligence), I propose to mobilize BI (Body Intelligence) as that swarming power. In times of a disruptive-conservative AI revolution I propose a more creative and less disruptive BI r/evolution.

A radical movement freedom lies at the core of our subtlest variations of proprioception. At the roots of our motion capacities lies a deeply rooted swarming power, a pleasure and joy in continually expanding into new configurations, n-figurations, compositions, a joy in reciprocal mutation as never-ending growth inherited from 4 billion years of bacterial sex as genetic recombination: we are the radically symbiotic offspring of 4 billion years of bacterial orgies, and that is our richness.

Mutation was never an error in genetic copying, it was the a priori: partial copies emerged from within fluctuating molecular swarms. Sex is that mutation, which is mostly epigenetic, affective, ecosystemic. Our nervous system is a late offspring of molecular and bacterial swarms and in every single protein folding in our tissues there is more movement versatility than in an entire body.

But in order to let this variation come up we have to put control to the side quite a bit, as it implies projecting predictions of what you already know and aim. *The more you control, the less freedom you have*: the more you impose a will to orient and reorient movement in predictable patterns, the less you can unfold the creative potentials of moving with others in emergent configurations.

We are symbiotic hybrids, radical crossbreeds, and reductive reason is but one mode of thought, a linear movement of thought that imposes its causal ratios. Binary sex and gender, racism, speciesism, ableism, are modes of bodily categorisation related to historical, reductive, counter-evolutionary modes of organisation and thus domination and oppression. Binary categories and dualisms are grounded on the dualistic and linear geometry of linear perspective. It is their very condition of possibility.

At stake is to claim a trans-species, *mestiza*, neurodiverse, microsexual (post-queer) nature-culture, of bodies that no longer look at each other from fixed points of vision, but who *propriocept* each other in reciprocal and emergent reconfiguration.

### **In search of lost proprioception**

There is a sense that few people know about and yet it is perhaps the most important of all: proprioception, which is the sense of internal movement of the body, grounded on the multitude of receptors in the body that sense changes in muscles, tendons and joints, giving us continuous feedback, conscious and unconscious, of relative position, elongation, dynamic tension and torsion, speed or effort. It is the sense that integrates all external sensations (and internal organs) in our movement, directly connecting action and perception. It is the sense in which the most primordial notion of self and relation to the world is based. It is the deepest ground of empathy and meaning, which connects us bodily and primordially with things, it is the basis of memory and experience as a process that does not necessarily go through rationalization, and that some theorists like Gibson (1979) have called direct perception. The sense of spatiality and temporality, of texture and dimension of something, of speed, of rhythm, all this and more generally the embodied knowledge of the world, of objects, actions and relationships, memory and learning, have a deep base in proprioception. It's is the true Common Body, of entanglement with the world and of embodied knowledge, of self and world as dynamic fields in co-constitution, transformation and intra-action<sup>15</sup>. Ultimately we can only know that which becomes part of our proprioception in some way or other.

The entire understanding of perception has been grounded for millennia upside down, on the fixed point of vision -the most reductive mode of perception coming up on Earth so far- and its associated rational and disembodied subject, creating a terrible onto-epistemological muddle. The little and recent attention proprioception has had is astonishing, is it an effect of the weight of the Aristotelian tradition of the five senses? And how come that Aristotle, in spite of his concern with perception and movement,

never considered a muscular sense of movement?<sup>16</sup> Besides some few mentions to a muscular or kinesthetic sense in the Renaissance and the nineteenth Century, it's Sherrington (1906, pp. 114, 131, 317) who named it in 1906 as linked to specific receptors (and actuators) and as part of an integrative function of the nervous system, always together with extero- and interoception, and crucially defining it as *proprioceptive field*, as microcosm made of endless changes just like the surrounding world or cosmos. but the revolutionary implications of his study have been ignored it seems. Later, others like James Gibson (1966, pp. 33-38) emphasized it as overall sense of body-self grounded on different receptors including proprioceptors proper but also many others (balance, vision, etc.), and as ecological sense of world (Gibson, 1979), since through our movement we feel also the world *as* our capacity to relate and act in it, or in Merleau-Ponty's (1962, pp. 279ff) terms we craft ourselves a world of relations. More recently Brian Massumi has brought attention to proprioception as potential ground for developing "technologies of emergent experience" and for the possibility to take it "as the general plane of cross-referencing" for experience (Massumi, 2002, pp. 191-192). This essay builds precisely upon those two claims.

In a double loop I want to take proprioception back to the "muscular" sense as the site of integration of all sensing in our motion capacity, but also as the distributed network of sensors and actuators across all tissues that bears the most direct inheritance from our bacterial swarm ancestors and their decentralized self-organising movements, where neuron microtubules are actual remainders of undulipodia, protein mobility systems of bacteria (Sagan, 1992, p. 369). It's as if all other senses, the entire nervous system, and the brain itself, were extensions and modulations of this primordial swarming sense, and not the reverse. In this sense the "proprio" part of the term seems inappropriate as it is an open and transformative perceptual process that undoes the fundamental split between a self and a world, not one oriented to bounding a self, although it is the ground from which any conception of self can emerge. Thus, I sometimes refer to it as *allo-ception*. Most of what has been called tactile is in fact proprioceptive: If I hug someone I feel that person through my own muscular tensions and pressures, my own tissue deformations.

Expanding beyond the theories of Sherrington (1906) or Gibson (1966, 1979), I propose that proprioception is not only our primordial knowledge of ourselves and the world (no longer separable), but it is also a primary evolutionary process: this way of feeling others and the world through the very transformations conforming oneself as a field can also be seen in molecular, bacterial and cellular assemblages, some of them evolving into tissues and organisms. I call this *arché-proprioception*, and it could even be applied to non-organic life-matter, in terms of how any compound of particle-waves, atoms or molecules, holds together through chemical-electromagnetic (or other nuclear) affections holding together the field and intra-acting with other fields.

Arché-proprioception is thus the mode of perception and self-organisation (open feedback) of emergent and self-organising fields at any level (subatomic, molecular, bacterial and cellular, organismal, social, planetary, cosmic, etc). The way in which any movement field consists implies, at molecular levels, the sensing of chemical reactions and gradients: the tuning of oscillations. At cellular levels there is a fundamental

mechanism by which cells apply force to sense a medium, just like we feel the texture of something by applying force and proprioceptively sensing the deformation of our tissues. Evolutionarily this arché-proprioception comes first as the way in which a movement field senses its internal relations, senses the world through the modifications of those relations, and readjusts those relations in relation to a world. We sense the environment primarily through the proprio/alloceptive deformation of our tissues, which is also our capacity to act and transform the environment itself and ourselves with it. The world is ultimately made of multiple proprioceptive fields reciprocally composing or reattuning their modes of fluctuation and oscillation: *the world is made of entangled proprioceptions*.

I propose that our nervous system emerges from endlessly varied, self-organising arché-proprioceptive fields of movement in bacterial assemblages over eons, and claim that a body still has this self-organising movement capacity well beyond the chimeric and reductive centralised agency of a rational subject, that is grounded on reducing perception to fixed points of vision and movement to linear trajectories in a geometric space. BI (Body Intelligence) is my name for the self-organising, swarming movement capacity of a body, grounded on arché-proprioception, which I oppose to AI (Artificial Intelligence) as a way of mimicking already reductive, rule-based and segmented causal movements: algorithms. BI instead emerges or swarms bottom up, unfolding from quantum fluctuations, along the entire evolutions of the universe.

Proprioceptive movement is not so much in the joints displacing as in all the tissues in-between conforming a tensional field emerging bottom up from molecular levels in evolution. The body is thus a field of movement of infinite potential variations and in constant fluctuation. *There is a more-than human amoeba in us*. And yet we normally explore a minimal amount of possibilities due to the rigid repertoires of posture and gesture that have come up in highly technical and geometric environments, promoting a radical atrophy of proprioception as well as minimising the openness and self-organising emergence of movement in a body. Relations become geometrically fixed and with them sociality freezes under the pressure of disciplinary and control architectures.

The spectrum of proprioception and its fundamental role in multisensory integration, linked to behavioral indeterminacy as an emergent capacity for action in a changing world, is radically minimized in a society that since the Renaissance at least (and with much earlier roots) is based on orienting ourselves according to fixed points of vision, *fixing both our movement and the environment's while splitting one from the other*, thus allowing to reduce movement to coded segments, such as every time we click on a screen or keyboard. Funnily, or tragically enough, this impoverishment and atrophy of our movement-perception capacities, linked to increasing externalization of movement to particular kinds of technical bodies, has been the measure for Civilization! This impoverishment of the proprioceptive spectrum, which separates, reduces and atomizes us as bodies, is a fundamental problem that cannot be solved by attending only to the content of the media, but by reinventing their most basic structure, and meanwhile ontohacking them by varying our movements, disaligning. In the current digital age, this impoverishment is underlying the functioning of the autonomous



algorithmic systems behind each app on a Smartphone that redirect our behavior continuously. But not all technology is reductive, it's time to mobilise less reductive life *téchnes*.

### **Proprioception regained**

How to regain proprio-/alloception, not only giving it back a richer spectrum that it perhaps had in the past but opening it up to an infinite horizon of reinvention, while resisting reduction and control?

Control is linked to prediction and preemption, to minimising openness in favour of Closed Wholes, and a fear that builds upon the phantom of entropy and chaos as disorder raised by the monsters of pure orderly reason. Control works against the subtle balance of consistency and indeterminacy grounding creative evolution' in tautological self-affirmation. Undoing this fear implies regaining the ancient etymology of *chaos* as *opening*<sup>17</sup>, and *entropy* as *change within*.

It's about unleashing the googolplex in us. Rather than letting Google unfold a googol of monetized possibilities in front of our immobile bodies, let's unfold the googolplex of our movement in excess of any capitalization, a new (and ancient) economy of the *common body*. Our movement potentials are infinite: but they are not to be sought in the realm of quantity within the movements we already know, rather they need to be sought in the qualitative variation of our proprioceptive movements, in the minimal variations of our tissues, torsions, tensions. And even more importantly, in our entanglement with the world: how we propriocept other bodies and environments, and ourselves through them, as the ground for a new radically entangled but open conviviality.

Bringing about this plasticity requires developing sustained movement and perception practices, improvisation techniques.

Metabody Techniques are movement improvisation techniques, technologies and practices which I develop since 2001, aiming to unleash the infinite capacity of variation of movement, and to do so through the ongoing subtle deviation from previous patterns. *Not everything is possible but the possibilities are infinite*<sup>18</sup>: I cannot jump to the moon but the folds in my proprioception have infinite potential variations.

Disalignment techniques are not simply about deviating from one line onto another, rather, they are about blurring reductive linearity back into a more swarm-like movement, dissolving the pattern, form or trajectory into the consistent openness of a swarming field. Our proprioceptive field is not in trajectories of joints but in the tensional and torsional tissues in-between, in constant fluctuation. The body is always fluctuating even as we walk or displace, even when we pretend to be still, and in excess of the narrow spectrum of decision-based movements. And we *feel* this, in its splended vagueness and openness, thanks to proprioception (and multisensory integration).

At stake is to regain, and take beyond, a sense of entanglement with the world in which we propriocept ourselves and the world, in the same act of moving and in excess of rational awareness and control, as Open Wholes<sup>19</sup>. This doesn't necessarily imply a collapse of rationality or subjectivity but its resituation in a less central and dominant

position. We need to enact less categorical uses of language and more open accounts of selfhood by bringing proprio-/alloception more to the foreground of experience.

As I approach you or hug you, you become part of my proprioceptive field, which is also a memory. In the process we recompose reciprocally. Though of course often this possibility is limited: a movement gets imposed from one side and we adjust to it or not. Most of these imposed movements are no longer perceptible, they have become implicit, as the act of alignment with a perspectival interface or a gender choreography. We need to develop an art of interpretation of the degree of emergence and openness in our movement fields.

Resonating with numerous movement practices emerging over the last century, Metabody techniques also differ from many of them in that they are not only dynamic, improvisatory and choral, but also based on the continuous subtle variation, the disalignment from previous patterns, questioning the idea of a body as something defined: its proprioceptive, energetic<sup>20</sup>, affective, nervous and electric, chemical, hormonal, metabolic and epigenetic fluctuations and (meta)fields are infinitely varied, they can reciprocally affect one another in non-linear ways (the body as transmodal field of fields). These variations need to be elaborated, through continuous subtle variation/disalignment: in this subtlety of the smallest possible variation (*clinamen*)<sup>21</sup> lies the power of continual unfolding of potentials, which is also the creation of plastic swarming ecologies together with others.

Metabody techniques work against alignments as reductions rather than try to learn alignments, but this also allows one to get aligned better and more critically and creatively when the case comes. The techniques don't propose to bring into conscious awareness or mindfulness the infinite swarming capacity of the body, rather they propose to open experience up to a much wider spectrum in excess of reductive consciousness (that tries to reduce movement to lines, causalities and localizations), an awareness which will however be used residually to identify alignments from which to deviate. Bodyfulness, not mindfulness!

The most powerful tool and *téchné* lies in the subtlest variations of our movement, and how this recomposes our entire field of multisensory and proprio/alloceptive integration. It recomposes ourselves and our worlds towards a more plastic kind of reality. This is what I call *Ontohacking*. What disruptive technologies lack is precisely this radical creativity and subtlety: they mostly reproduce very conservative conceptions of the self, or of space-time, at least on the surface, while allowing other abstractions to take control in the opaque background. Inventing radically new accounts of space-time, of self-world, takes the radical subtlety of movement disalignments/variations. Slow down your gesture, tilt your head, allow an infinitesimal fluctuation of your posture, do it while walking and talking with someone in the superaligned street, let the proprioceptive swarm move in its behavioral openness, and the space-time, self-world matrix opens up to indeterminacy, to undefined and ongoing reconfigurations and n-figurations.

Metabody techniques currently include:

- Disalignments (Val,2017a): micromovement techniques with focus on proprioception and subtle ongoing mutation described above;

- Flexinamics(Val,2017b):flexible dynamic structures that act as body extensions or wearable architectures, proposing an emergent space ontology based on proprioception;
- Microsexes(Val, 2017c): an antiperspectival machine where microcameras on the skin give the body a new amorphous perception of itself as postanatomical, amorphous, of infinite and indefinite emergent sexes and affordances;
- Amorphogenesis (Val, 2017d): where computation and gaming culture is subverted so as to enhance proprioceptive indeterminacy and richness through an interactive system involving sensors on the body and amorphous digital architectures, including spatialised sound.

They have evolved since 2001 within my artistic work as *metaformance*<sup>22</sup> techniques: processes of perceptual transformation that involve the audience deeply, avoiding to place them as mere spectators, and they converge in the Metatopia environments (Val, 2017e), part of the Metabody project (Val, 2017f): half performances, half installations, sometimes intimate one-on-one encounters, often nomadic and choral, in open spaces: like an alien revival of the Dyonisian chorus<sup>23</sup>.

Disalignments are not a question of deviating from one line to another but to open up the narrow causal account of movement to a broader account of movement as field where the line becomes swarm.

Disalignments are anti-choreographic improvisational techniques to unleash a body irreducible to patterns, irrepeatable, that sustains behavioural openness. It's about unfolding the infinite combinatorial of our 360 joints swelling up from quantum fluctuations in every atom in every protein, unleashing the self-organising capacity of the body to move, inherited from 4 billion years of bacterial swarms, and taking it into new thresholds of plasticity that may exceed every reductive inflexion of imperial cultures of domination.

Disalignments typically take the form of group improvisations exercises lasting several hours, that may be grouped in a week-long workshop or, even better, performed daily, deepening and changing the focus every time: from an overall listening into proprioception, letting it unfold as a field of infinite potentials, moving-feeling without controlling, co-sensing with the floor, clothes, muscles and joints, in the integration of interoceptive, exteroceptive and proprioceptive, with other bodies, flexinamic structures, digital systems or other extensions, with furniture, spatial and temporal sensations, indoors and outdoors, intervening in urban spaces or daily situations, disaligning gender or other power choreographies, while expanding one's primordial sense of self as a never-ending, consistent but open proprioceptive swarm, exploring the endless and blurry micropoliphony of sensations that exceeds any rational prehension.

The cue is: always only the minutest variation, *clinamen*: slow down, tilt you axis, deviate or suspend in the middle of a gesture and let a new torsion happen, and develop a capacity for plastic rhythms. Always only the minutest deviation from every previous knowledge, “pattern” or alignment that the body previously had, adding onto it a capacity for pure plasticity, for irreducible complexity, a plastic memory, and a deep sense of proprioceptive entanglement with the world, a transformative sensitivity for co-sensing and becoming with others in constant reciprocal mutation of proprioceptive

fields: a becoming microsexual, metaspecies, mestiza, neurodiverse (further discussed below).

Quantification only captures those aspects of a body-movement that can become aligned with measurement apparatuses. When these apparatuses become dominant, the behaviour of bodies gets predominantly reduced to the alignments with the apparatuses, imposing a radical reduction of potentials. Control is thus crucially based on impoverishment. I propose a countermove towards sustaining and increasing the complexity and openness in our movements-perceptions, a countermove that sustains and subtly increases behavioral indeterminacy. This will not only imply a resistance to control systems but the sustainment of richer ecologies and worlds.

We have a radical evolutive challenge: if the algorithmic and geometric era has been a reductive inflexion within the bacterial and proteinic era of elastic-plastic movements, the great challenge is, not in going back but in exceeding those abstractions with a movement plasticity never seen yet on Earth, swarming in unheard-of manners, new unheard-of tunings and resonances.

Like in Kubrick's *2001: a Space Odyssey* we face a journey beyond the infinite to overcome the monolithic fold of reductive intelligence, of which AI is the teleology and most accomplished expression: but this journey towards a more-than-human sensitivity, is inside the body and across bodies, in the swarming power of proprioception and BI, Body Intelligence.

In ancient cultures choral practices were often related to rituals of ecstatic and orgiastic reunification with Nature, precisely where the split from Nature was starting to articulate itself more and more. This is the case in the Greek Chorus of the Dionysian Mysteries. Plato subverted this ecstatic and orgiastic chorus of dancing and singing bodies, where all oppressed classes would reunite, in his final dialogue, *The Laws*, and made it into a fundamental technique for bringing circular order into the movement of the bodies, a foundational means of education in his ideal city. It's time to undo his reversal and bring back another type of chorus, not the old one but a new chorus, yet unseen on Earth, capable of exceeding every reductive inflexion exponentially conquering the Earth in the nihilistic black hole of Technological Singularity<sup>24</sup> and its previous sovereign and disciplinary inflexions.

Can we unleash such a contagious sensitivity for mutation, that domination and control reveal their poorness and negativity till they get finally abandoned? Can we unleash across all bodies an antivirus of ongoing disalignments, as creative force of evolution, that keeps going, growing and counterbalancing the reductive alignments of domination?

### **Co-sensing and Becomings**

Propriocepting is all about co-sensing: sensing oneself as movement field, in the same act of sensing others and the world, while identifying how far the movement is emergent in ongoing reciprocal attunement, or imposed by oneself or others: how far are hard splits imposing themselves, as alignments.

A new co-sensing ethics is needed at a time where the verbal consent of a rational human adult is ill-equipped both to cope with the opacity of autonomous

algorithms (or even marketing technologies), which act upon non-conscious spectrums of experience, and to take care of our trans-species, neurodiverse, symbiotic, mestiza and queer variations, within dominant ecologies privileging the human rational sexually-binary male adult and limiting movement to linear trajectories of decision making based on fixed points of vision.

A co-sensing ethics will try to understand when movements are being imposed and when they are more emergent and reciprocally composing in any relational field. For instance, a perspectival system imposes a rigid sensory ratio affording normative categorizations, seamless quantification and splits, and the algorithms running behind an app sense you and profile you but you have no clue about them. Gender or other power choreographies impose themselves, as bodies implicitly (performatively<sup>25</sup>) reproduce their alignments. An affective ecology of co-sensing can afford emergent relations across and in excess of any normative boundaries-enforcing dominant ratios: Radically trans-species, queer, mestiza and neurodiverse ecologies can be founded if we elaborate a new sensibility grounded on proprioception as radically entangled but open convivialism, rather than on fixed points of vision as ecology of categorical splits.<sup>26</sup>

A movement revolution (Bowman, 2016) and evolution may be mobilised that undoes millennia of reductive perceptions and categories of sexist, speciesist, racist and ableist oppression, of reductive ontologies of measurable space-time and dualistic subject-object splits.

Lynn Margulis exposes how evolution is an issue of radical symbiosis and mutation as effect of the continual and radical sexual experimentation of bacteria (Margulis & Sagan, 1990; 1997). Humans are chimeric bacterial hybrids and symbionts. The ontological primacy of fluctuation unfolds in the primacy of mutation, hybridity, thus of trans- and meta-species relations, and crossbreeding, where sex is primordially an issue of mutation, not of reproduction. Rationalism has imposed an extreme reduction through the idea of the bounded totality of a disembodied self that self-replicates: a perspectival chimera. Instead of these monsters of linear reason, autistic perception is, as Erin Manning (2017) claims, a richer mode of perception-cognition that doesn't follow the reductive categorising thrust of rationalism, that keeps opening to the uncategorised.

Co-sensing is also affecting one another, in open-ended ways, proprioceptively. Claiming a radically plural culture where multiplicities of modes of cognition (neurodiversity), affectivity, hybridity are foregrounded, as expression of creative evolution. Co-sensing implies accounting for the transspecies affect with our nonhuman lovers, friends and life companions, and for the symbiotic affects grounding our ecologies creating conditions for a becoming trans-or meta-species.

Like in Gloria Anzaldúa's (1987) *mestiza*, we need to heal the split developing a new consciousness, she calls it, in between and in excess of dualist categories, and in continual motion, holding together contradictions, of moving across borders and thinking beyond binaries. Becoming *mestiza* implies, particularly for people socialised as white but not only, making explicit the multiple implicit chains of slave societies and colonialism of which reductive perceptions are crucially part.

Co-sensing also implies a microsexual (post-)queer<sup>27</sup> becoming in which *bodies sense each other proprioceptively rather than perspectively*, mobilising the molecular swarms of proprioception, reciprocally recomposing in the process, resisting the imposition of movements precisely by heightening a co-sensing sensitivity, recovering the evolutive role of sex as mutation: perceptual, epigenetic, affective, desiring, ecosystemic mutation.

### **Meta-species manifesto**

Ethics and legal ontology are poorly equipped to deal with the demands of creative evolution, anchored in a discourse-centrism of the rational subject, of the supposed free will and verbal consent; bioethics is in the best of cases patho-centric, based on measuring the degree of suffering, but not positively studying the way in which hybrid affective ecologies are the basis of all evolution, biodiversity and sustainability on Earth. Continuous reciprocal and collective mutation is the basis of life, not the identical reproduction of the same grounded on categorical splits and immobilities.

Affects (animal or not) are the collective mutation that creates ecologies based on the diverse. Affects are not emotions of a subject, they are relationships, affections, movement, co-sensing, propriocepting. Symbiotic affects are the transversal way to decolonize all bodies: Can anyone deny the affects of animals, neurodiverse, non-rational subjects, children (non adults), sexual minorities or migrants? Ecologies of *mestiza*, neurodiverse, transgender and trans-species affects are the ground of a bio-resistance on Earth against the annihilation carried out by dominant systems that reduce, impoverish, kill our richness, liveliness and plasticity.

I claim a world in symbiosis in which the "human" not only stops pretending to be the center, but, renouncing to any privilege of species, gender, class or capacity, renounces therefore the very notion of species, embracing the same becoming trans-species or meta-species that sustains all (bio)diversity on Earth. I AM NOT HUMAN, neither man nor woman, nor white, nor European, nor rational, nor abled. I am neurodiverse, *mestiza*, transgender, trans-species. Aware of passing for eurowhite I claim my blackness and *mestiza* nature (hybrid of Jew, black, Arab, Indian, roma, white, Christian, Nordic, pagan... like almost all "Spanish") and claim the superiority of all hybridity... Aware of passing for rational abled I claim my proto-autistic neurodiversity... Aware of passing for gay man I claim my trans / post-gender non-binary, orgiastic, post-intimate, polyamorous, nudist, whore, microsexual and post-queer natures... Aware of passing for human I claim my trans-species and bacterial symbiotic metahumanity... I AM NOT HUMAN, neither man nor woman, nor white, nor European, nor rational, nor abled. I am neurodiverse, *mestiza*, microsexual, trans- and meta-species.<sup>28</sup> I am a bitch more than a cyborg. I am an Ontohacker. I AM NOT A SELF. I am not a unit or a duality, nor an individual, nor a subject, nor an object, nor a State, nor a museum, nor a selfie, nor a police profile, nor a profile in a social network, nor the appendix of a planetary network of algorithms. (I am not on Facebook). NEITHER HUMAN NOR CYBORG (and both and much more). I am a molecular swarm, a metabody. (I'm not ... I become.) IN BECOMING. IN BECOMINGS. IN BECOMING-WITH...

## **In/conclusion - Less disruption and more lively convivialities**

This proposal is not technophobic, quite on the contrary it's about a much more radical creativity with our life *téchnes*. Disruptive technologies are in many senses highly conservative and un-creative, building upon control paranoias of a historical ego and all-encompassing thrusts to quantification, leading to a type of hyperfascist sociality of implicit social credit, of which Facebook is as accomplished an expression as the new Chinese government's social credit system<sup>29</sup>. We need a more radical creativity to reinvent our space-times and self-world conceptions. The arguments in favour of the new pseudo-sociality via facebook need to be strongly counteracted. Digital social networks impose an implicit social credit and scoring system based on quantifying everything, an overexposure and will to connect and to control. This feeds upon the splendid ruins of the freewilling subject who is maintained as inflated façade masking the underlying opaque algorithmic modelling of collective behaviours, based on millenia-old atrophy of proprioception and multisensory integration.

A new perception and proprioception needs to be mobilised that foregrounds our co-emergence and entanglement, between us and with the the world, enacting a radical sense of symbiotic conviviality across molecular swarms of microsexual (post-queer), *mestiza*, neurodiverse and transpecies affects.

In a society of hyperwork and hypersex (where any measurable movement can become capitalized, where everyone connected to the Internet is a potential hypersex hyperworker, one whose activities: sexual, affective and other, are constantly capitalised and reoriented), we better become explicit whores, mutant bitches (and dogs) who share and disseminate new orgiastic perceptual mutations accross bodies, unleashing our proprioceptive swarms of symbiotic affect and microsexual mutation, unleashing swarming intelligences of the body for a radically neurodiverse culture. A meta-species and *mestiza* symbiosis that brings back, and takes further, the creative evolution of our bacterial ancestors.

In times where Silicon Valley power elites want to materialise the Parmenidean nightmare of an eternal, immobile, disembodied (id)entity, proposing to reach immortality through mind-uploading and AI, it's more urgent than ever to recover a sense of the plasticity of movement and becoming (which are the most ancient concepts of philosophy).

The swarming power of Body Intelligence (BI) needs to be foregrounded in times of reductionist promises of AI revolutions. Hacking our ontologies and the ontological tradition of fixity implies creating more plastic movement realities. Becoming ontohackers implies a radical movement evolution/revolution/n-volution for ecologies to come... or rather, ecologies in becoming.

## **CODA on COVID-19: the virus as ally for a new planetary mutation**

All the ideas presented here seem more timely (and untimely), indeed more urgent than ever in the face of the COVID-19 pandemic, which is likely to push the already existing regime of bodily atrophy and digital surveillance to unprecedented levels, given

prolongued confinements and how these may evolve into a new global economy of movements based on increasing social distancing and control.

But perhaps the virus arrived too soon in the shift to algorithmic governmentality and bodies will feel the threat and react? Hopefully the quarantines can awaken a reaction in bodies against this reductive tendency that was silently imposing itself without resistance?

To those of you confined in quarantine, in this or future situations, I remind you of the *radical movement freedom* that you may always unfold, through minimal subtle variation, in the endless proprioceptive field that you, as a body, are.

Let this be a source for a movement r/evolution.

Viruses were always the ally of evolution, affording genetic diversity in moving across bacteria. Hopefully we can also have this virus unleash an unprecedented mutation that decenters the black-hole singularity of control dystopias, launching an evolutive leap, a deep mutation beyond the reductive inflexions of our epochal vortex.

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<sup>1</sup> A 1 followed by 100 zeros, based on which is the name of the company Google. On the combinatority of joints see Bowman (2017, p. 60).

<sup>2</sup> A googol to the power of googol, a number with more zeros than atoms in the universe. This is not meant as a positivistic claim, but as a metaphoric approach to the infinite capacity for variation of a human body.

<sup>3</sup> Biologist Lynn Margulis is the major exponent of a theory of serial endosymbiosis, or a continued process of symbiosis and symbiogenesis, and of bacterial sexual experimentation, or hypersex, grounding gene exchange and ongoing mutation, which are both interrelated and core to evolution (Margulis & Sagan, 1990; 1997).

<sup>4</sup> However Judith Butler's and Jacques Derrida's politics of performativity is still valuable as one particular movement within discursive alignments.

<sup>5</sup> "Becoming-with" (Haraway, 2008) is Donna Haraway's reply to Deleuze and Guattari's "becomings" (Deleuze & Guattari, 1987). While the latter propose becomings as movements of complete deterritorialization, as in becoming animal, Haraway criticizes their despise of companion species and claims the relational aspect of becoming and the need to claim any vulnerable category. Becoming is in turn one of the oldest and most fundamental philosophical concepts, present in all presocratic philosophy of which Heraclitus presents one of the most radical and best known doctrines, where becoming is a never-ending process of emergence whose logos and identity is the ongoing tension between opposites, a process not aiming to a teleology: the latter was brought in later by Aristotle, dominating Western thinking ever since.

<sup>6</sup> I have developed the theory of the Algoricene or Age of Algorithms in numerous essays and research projects (Val, 2017; 2018), as age where movements-perceptions, individual and social bodies and architectures become increasingly geometric and algorithmic, starting before ancient Greece with gridded textiles or cities and expanding exponentially in digital culture.

<sup>7</sup> I am building here upon embodied cognitive science and taking it beyond its usual ontological boundaries.

<sup>8</sup> See Bowman (2017) on how movement changes gene expressions.

<sup>9</sup> In reference to Foucault's account of sovereign societies (ancient societies distributing life and death) and disciplinary societies (from the XVIIth century, optimizing the performance of life in relation to Industrial Society) and to Deleuze's (1992) account of a society of control (flexible and dynamic feedback systems able to capitalize novelty, sine cybernetics and WWII).

<sup>10</sup> I resonate and try to take further some of Bergson's (1944) theories, in particular in relation to movement and perception.

<sup>11</sup> See Malabou (2008, p. 12) and Hayles (2012, p. 12).

<sup>12</sup> Quantum field theory proposes vacuum fluctuations as constituting not only most of the mass of atoms but also as fundamental state of vacuum, and as source for the fundamental fields of nature and for the universe's history. See for instance Barad (2012, p. 17) on Quantum Field Theory and the ontological indeterminacy at the core of matter.



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<sup>13</sup> I suggest that every imperial social organization is underlied by a different type of geometric or more general reductive organization of movement. For instance in China grids or engraving existed at the same time or even before they did in Europe but they didn't become source of a full-scale and all-encompassing system of rationalisation, as they did in Europe, grounding what is arguably the most succesfull and pervasive system of domination, while also controvertially associated to the history of democracy, as well as of slave societies.

<sup>14</sup> For a full genealogy of the grid see Peggy Reynolds (forthcoming).

<sup>15</sup> Intra-action, following Karen Barad, is "the mutual constitution of entangled agencies" (Barad, 2007, p. 33).

<sup>16</sup> His *De Motu Animalium* points though in the direction of proprioception.

<sup>17</sup> In its ancient etymology, as in Hesiod's Theogony, *Chaos* is a yawning cave or abyss: an opening (Jaeger, 1947, p. 13; Thomson, 1954, p. 151).

<sup>18</sup> Rephrasing of Barad (2012, p. 12): "There are an infinite number of im/possibilities, but not everything is possible."

<sup>19</sup> See Bergson's *Creative Evolution* (1944) on the Open and the Whole. I define movement fields as the consistency of the open, as Open Wholes.

<sup>20</sup> Differing here from chakra theories that define universal energetics of the body.

<sup>21</sup> The *clinamen* is a concept from Epicurean atomism appearing in verse 292 of the second book of Lucretius' *De Rerum Naturam* that speaks about the infinitesimal deviations of atoms from their trajectories accounting for how novelty and free will come about in the world.

<sup>22</sup> Metaformance is a neologism put forward by Claudia Giannetti (1997) since 1994 to describe the characteristics proper to the interface as predominant trope in media culture, foregrounding relationality, indeterminacy, feedback or recursivity, a collapse or redefinition of traditional splits between observer, work, author and process, and the absence of an external viewer. I retheorise it as aesthetics focusing on the infrastructure of perception rather than its content, and as possibility to bring about more plastic perceptions, where multisensory integration and reconfiguratuions of the proprioceptive field are more emergent and open.

<sup>23</sup> The ecstatic and nomadic group of dancing and singing bodies from which, following Nietzsche and others after him, Greek Tragedy arose, linked to the Dyonisian Mysteries, a religion of the oppressed and of reunification with Nature.

<sup>24</sup> The TS is a controversial theory defended by powerful technology company leaders like Ray Kurzweil, about the expected emergence of a strong AI, far superior to biological intelligence, around 2045.

<sup>25</sup> Performativity in language is the power of certain speech acts to produce what they say, as in a court's pronouncement of a sentence. But through Derrida and Butler, the power of performativity is defined in relation to decontextualising existing acts or norms, subverting them, as in the term *queer*, originally an insult, that gets subverted when appropriated in the first person.

<sup>26</sup> See Gebser (1985) on pre-perspectival, perspectival and a-perspectival cultures.

<sup>27</sup> Microsexes is both a project ad a concept I develop since around 2007 (see [www.microsex.org](http://www.microsex.org)), resonating with Deleuze and Guattari's "tiny thousand sexes" but bringing them into a level of proprioception and an amorphous account of the body and perception, a post-anatomical body (Val, 2009; 2016) that is linked to bacterial sex and the orgy in evolution, since our tissues and proprioception are expression of it.

<sup>28</sup> Of course, one should ask whether someone who passes for educated European white man, enjoying largely the privileges of the hegemonic subject, is at all entitled to speak bout decolonization, racialization, neurodiversity and so on. Is the quest for a becoming amorphous only the phantasy of a hegemonic subject who can already enjoy visibility? Or can we move beyond the visible/invisible dichotomy of power struggles into a more creative sense of indeterminacy as not simply being invisible or visible? Can we understand the imperative for visibility as also a kind of violence, and create conditions for worlds that are grounded on radically different perceptual paradigms? Can we create a culture and science of movement from within, a proprioceptive culture-science not grounded on external points of vision?

<sup>29</sup> A system for scoring citizens following behavioral traits derived largely from Big Data and surveillance systems currently being put in practice in China and which will define the access of citizens to services and their overall classification.

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