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Trans-sensory hallucination*

Alucinação transensorial

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Abstract: After a short reflection on theories of the digital and non-digital, this essay is concerned with questions of common perception, un-common senses and a strong focus on kinaesthetic, trans-sensorial notions of *ex-stasis*, and the material affects of environments. The author discusses examples drawn from atmospheric studies, architecture and choreographic objects, as well as the design of wearables used in sensorial performance environments which themselves are conceived as formative, not built or constructed in a stable form. Furthermore, basing its investigation of such elemental environments and aural choreographies in recent productions of the DAP-Lab, the essay explores the impact of wearables on movement choreography and immersion within choreographic installations. It also addresses more speculative developments of how bodies and wearables come to affect, and be affected by, augmented reality and virtual reality interfaces within kinetic atmospheres – here called “kimospheres” – in the sense in which the composer Xenakis had envisioned reverberant multimedia architectures and spatial intensities to be live instruments, not static objects or envelopes.

Palavras-chave:

Atmosfera Cinética.
Cenografia. Realidade
Aumentada.
Vestimentas.
Virtualidade
Aumentada.

Resumo: Após uma breve reflexão sobre teorias do digital e não-digital, este ensaio se preocupa com questões da percepção comum e dos sentidos não usuais, enfatizando a *kinaesthetic*, noções transensoriais de *ex-stasis*, e o afeto material do ambiente. O autor discute exemplos retirados de estudos atmosféricos, de objetos arquitetônicos e coreográficos, assim como do design de vestimentas usadas em ambientes sensoriais performáticos que foram concebidos como formativos, não construídos em formas estáveis. Além disso, baseando suas investigações em ambientes elementais e coreografias aurais de produções recentes do DAP-Lab, esse ensaio explora os impactos das vestimentas que afetam, e são afetadas por, as interfaces de realidade e virtualidade aumentada em atmosferas cinéticas – aqui chamadas “kimospheres” – no sentido em que o compositor Xenakis havia imaginado: arquiteturas multimídia reverberantes e intensidades espaciais para serem instrumentos vivos, não objetos estáticos ou envelopes.

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Fig. 1 - Yoko Ishiguro, rehearsing with large stage dress and Kepler object, *kimosphere no. 3*, 2016 © DAP-Lab



1 THE DIGITAL AND THE NOT DIGITAL

This introduction is about common senses and uncommon senses, insofar as I wish to draw attention immediately to the sensorial and embodied perception approaches that underlie my writing here. It is important to use the plural, as I propose to look at thresholds of perception – here in the context of dance and performance installations – which take us across not only various materialities but also divergent modes of physical thinking (to use a choreographic expression). Such physical thinking strays across sensing – listening, touching, smelling, swaying, reaching, flailing, disaligning, blurring – not necessarily based on visibility. This includes subliminal and peripheral sensing, rhythms of sensation, vibrations, proprioceptive and imaginary relations, dancing as a kind of morphing, detailing the imperceptible. The *uncommon senses*, neuroscience philosopher Barry Smith proposed on a BBC Radio4 program¹, are the ones we are less conscious or clear about – thermo or mechanoreceptor nerves in fingers, arms, or the spine, giving us tingling sensations; skin and hair sensing temperature and wetness or feeling textures, though not reliably; muscles and ligaments that “hear” how our anatomies, the bones, minerals and water in bodies, move along and stumble about; how organism and metabolism are comfortable or tensed, affected and afflicted by the environment as well as internal biophysical processes.

¹ Barry Smith, with sound artist Nick Ryan, “The Uncommon Senses Radio Series,” BBC Radio 4, March 2017. See <https://www.bbc.co.uk/programmes/b08km812/episodes/player>.

If we leave vision aside, for a moment, and think of the digital context of art and all other popular cultural media of spectacular consumption, then we also need to invoke numbers – counting, measuring, moving forward, progressing, recounting, retracting– and the computational (*les numériques*), and thus the rather larger abstractions of what was until recent considered our ubiquitously dispersed, networked data world: *digital ground* (cf. McCullough 2004). I like to also think of it as under-ground, thus perhaps less visible on the whole, and yet vital, like the underground movement of water we know but cannot *behold*. Criticism of the naturalized digital ground is also vital (e.g. Kluitenberg’s *Delusive Spaces*), and necessarily so, if the electronic networks of predatory capitalism’s transnational governing agencies are not to remain ungraspable and incontestable (2008: 368).

The be-holding is a matter I actually want to connect to the hallucinatory, heightened sensuous pleasure of immersive aesthetics, as its inspiration has to do with the trans-sensory fluidity I wish to describe².² Yet the digital ground is also the ground many of us walk on, hold on to when developing control over corporeal rhythms, and if networked and social media are ubiquitous, so is our motion, our data traffic that is harvested. It is now commonly agreed that in advanced post-industrial metropolitan sites our refrains of living and communicating are deeply infused with technical dispositions, as well as continuous capture. But I cannot quite see this as a *natural* condition, and thus it makes less sense to think of our era as post-digital. I grew up in a nature environment – river valley, forests and hills in agricultural seasonal rhythms – and I return to it every summer: I am then pretty nearly offline for two months. During that time I am neither pre- nor post-digital. In his book on *Motion and Representation*, Nicolás Salazar Sutil speaks of the “ecstatic position of digital technology,” as if it were outside of us to challenge or lure us, so to speak, to forget ourselves and the ground we walk on, to “move beyond a present state of kinetic being...moving in ‘ex-stasis’” breaking with our established kinetic spheres (2015: 75). These spheres, I gather (Salazar borrowing the kinesphere from Laban), are topological movement ideas – physical movement understood in relation to basic properties of expenditure and recovery, like the breath that animates us.

The era of the digital has only just begun, slowly, and for many who live in rural areas and still follow this rhythm of the seasons feeling the moist shadows of the dawn and the light

² My writing is based on a recent talk I gave on the subject of sensorial techniques of public engagement (engaging audiences or publics through immersive methods), and although I reflected mostly on my choreographies, public workshops and installations, I also drew inspiration from d’Eve 2017.

breaking through the branches of trees, being alive and knowing the ever-changing skies is not a digital experience at all. Being alive, as anthropologist Tim Ingold calls it, is not a matter of technology but of immersion in a continuously unfolding meshwork of relationships and wayfaring (moving through). The kinespheric idea, as Laban suggested, is dynamic and complex, and it helps us to imagine a movement of inner and outer dimensions or spatial articulation. And when I look up into the air, or listen to sound waves, the bird song and crickets of my valley, I also improvise, I feel vibrations of after-images, dreams, memories – expanded sensorium of the hyperreal and of imagined exuberances.

Immersion, therefore, takes on a certain significance as a category of experience if the term is now often used in conjunction with Virtual Reality, with games and with engineered atmospheres that range from the architectural, built environment, the urban spectacles of light and consumerism, to the various intimate aesthetic experiences designed by performance and sound makers, fashion and interaction designers, or biotechnological and bioscientific experimenters. Prostheses create affordances that point to their *Umwelt*, enabling new qualities of existence, relationships, inhabitations. My own sense of immersion as a technique, however, is derived from movement and from dance.

2 SENSORY ENVIRONMENTS

First I wish to argue that in the increasingly ritual times we now face in the post-Anthropocene, the aural and the kinetic senses connect us in an elemental manner to the apprehension of our physical space. I suspect ritual is on the increase, as many people come to realize the deprivations and deformations of our planet earth. In this geological time frame, performance scenographies move closer to an aesthetic exploration of atmospheres, climates, fluid weather-worlds and constellations. Scenographies conjure exciting, erotic, disturbing and yet alluring atmospheres, sensuous provocations inciting us how to bathe in them, to surf and to fly or making us imagine that we fly on the same aerial currents that animate the kites of the Palawan Highlanders. This is evoked in Ingold's astonishing retelling of the tale of their becoming like birds:

The Palawan Highlanders of the Philippines have a very special relationship with birds, considering them to be their close yet ephemeral companions. Their understanding of this relationship is epitomized in the practice of flying kites. Constructed of leaves or paper with

split bamboo struts, kites are regarded as the copies of birds. Flying a kite is as close as terrestrial humans can get to sharing in the experience of their avian companions. Playing the wind, flyers can feel with their hands, holding the connecting strings, what birds might feel with their wings. ‘Anchored to the earth,’ as Revel puts it, Palawan kite flyers ‘dream in the air, their thrill equal to the splendour of the whirling of their ephemeral creations’. Becoming like birds, their consciousness is launched on the same aerial currents that animate their kites, and is subject to the same turbulence. Armed with their kites, the Palawans have achieved the precise reverse of what modern art historians have achieved with the concept of landscape. Where the latter have confined the world within the ambit of its surfaces, the former, reaching out from these surfaces, have regained the openness of the atmosphere. (Ingold 2011: 135)

I now sketch some constellations referring to creative research engaged with kinetic architectures for moving bodies in augmented-reality environments. It would seem that open, affective environments have existed since ancient times when sacred dramatic festivals took place in amphitheatres, sanctuaries, temples (e.g. Javanese *Wayang kulit* shadow puppet plays were staged in village cemeteries). Theoretical discourse on *atmospheres* is fairly recent, derived from philosophy (Sloterdijk, Böhme), cultural geography, spatial studies and architecture (Philippopoulos-Mihalopoulos, Pallasmaa, Zumthor, Thibaud)³.³ But this notion of atmosphere, originally derived from perspectives of geography, physics and chemistry, of course now often relates to architecture/design, to questions of how designed space surrounding our bodies affects our emotions and moods.

³ The German philosopher Peter Sloterdijk (2004) has devised a philosophy of *spheres* and *envelopes*, contributing to the current interest in atmospheres and Gernot Böhme’s aesthetics, much as Andreas Philippopoulos-Mihalopoulos’s study of “lawscapes” as atmospheres draws attention to embodied social and political norms in the conflict between bodies “moved by a desire to occupy the same space at the same time” (2015: 3).

Fig. 2 - Yoko Ishiguro, Azzie McCutcheon and Elizabeth Sutherland performing with “large dress” in *metakimosphere no. 3*, DAP-Lab 2016 © DAP



When speaking of augmented reality in theatre or music concerts, we imply that the physically affective is amplified through technical means (sound diffusion, digital projections, lighting, etc), and thus an expanded sense of the choreographic is evoked, with various alchemical dimensions, and corporeal and perceptual irruptions. Augmented space enters us and our receptors receive many (often ambiguous) clues. The fullness of the real returns in such densely sensorial atmospheres of performance rituals we long to rediscover – immersion is craved, the sublime, the erotic and rapturous desired⁴.⁴ In the current experience economy, *immersion* and collective experience radiate. Exploring such contagious material conditions, our DAP ensemble have become builders.

In a recent rehearsal, after having suspended huge amounts of delicate, sensual gauze and white fabric from the ceiling of a warehouse space, attached to aerial wires that allow the fabrics to fly, I watched how dancer Yoko Ishiguro slowly emerged, like an amphibian creature, from under the fabrics, still shrouded by them, then extending the large dress so that it stretched out almost the whole length of the building. As we walked around, trying to

⁴ Examples from the recent history of music and sonic art are too numerous to cite, ranging from Xenakis, Paik, Lucier, and Stockhausen to drone and noise artists (Niblock, Fusinato, Ikeda) and sound installation artists such as Cardiff, Heimbacher, López, Wollscheid, Leitner, Suzuki, etc. On occasion, the reach for the sublime crumbles into the solemn pathos of the quasi-religious (e.g. Rirkrit Tiravanija’s *mise en scène* for Stockhausen’s *Oktophonie*, staged at New York’s Park Avenue Armory in 2013).

disentangle with eyes, ears and sensory touch what was un-folding, a tiny whirring sound was heard coming from the cone-shaped origami object she held in her hand: a sound instrument, reflecting dimly the blue light that shone on it. We call it “Kepler” – named after the recently discovered 452b exoplanet and constructed by my design collaborator Michèle Danjoux out of the same polypropylene material as the costume for one of the dancers.

The costume, in turn, was inspired by an interactive architectural origami structure we had been asked to perform with by a group of architects⁵.⁵ Materials, in other words, transitioned and became transformed, from architectural animation to wearable, from sounding/conductive costume to sound-object-choreography – re-contextualized kinetic characters and accessories. The sensory atmosphere thus impregnates aural and tactile experience while it implies movement, a “trans” motion across. Performing (with) architecture, then, is one of the sensory challenges I propose here for embodied scenography. How does scenography and movement choreography enjoin with spatialities both material and virtual? A haptic feedback relation seems inevitable, when we speak of these different materials that can be felt. Furthermore, when the dancer moves in the stiff polypropylene dress, two aural events happen. First, the synthetic dress itself creates sound: each time the dancer moves and tilts the dress, one hears a crackling or popping sound. Second, on her left arm she wears a sensor band; her interaction is meant to explore conductivity and sonic feedback. A small wired metal sheet sits in the corner of the space, and as the dancer (Vanessa Michielon) moves closer to it and eventually closes the conductive circuit, she elicits a sonic reaction. How, then, do we become ensounded in such orbiting?

Fig. 3 - *Metakimosphere no. 2*: Vanessa Michielon performing with “OrigamiDress” by Michèle Danjoux, in front of *caring-ami* architectural structure by Hyperbody. Azzie McCutcheon moves inside foreground gauze [right]. © DAP-Lab 2015

⁵ I am referring to DAP-Lab’s cooperation on the METABODY project with architects from the Hyperbody Research Group (TU Delft) who had devised *caring-ami*, a computationally generated origami pattern based surface with integrated lighting, motion capture and robotic actuation. Initiated in Madrid (2013) by a collaborative network of arts organizations and research labs (www.metabody.eu), METABODY posited the rethinking of perception and movement away from the mechanistic and rationalistic tradition, and thus also the dominant western tradition of visuality or oculo-centrism combined with formal and systemic “built” environments and protocols that take certain embodiments for granted. METABODY was coordinated by Jaime del Val (Asociación Transdisciplinar Reverso), with eleven primary partners including DAP-Lab, Hyperbody STEIM, InfoMus Lab, Stocos, Palindrome, K-Danse, and Trans-Media-Akademie Hellerau. See Birringer 2017.



3 ENGINEERING ATMOSPHERES: SONIC ENVIRONMENTS

Becoming ensounded is a fundamental consequence of movement, of the “trans.” If we invite our audiences to listen, and to touch, they will instinctively follow where the sound comes from, and where it goes. They will want to follow the dancers, listening to them and the sound their costumes make. They also will be orienting themselves through the lighting, the changes in lit areas, color moods, and allure. The theatre’s relation to engineering of atmospheres is commonplace, having been adopted as a paradigm for such operations by philosophers or architectural theorists from Vitruvius to Gernot Böhme. At a recent conference – *Staging Atmospheres: Theatre and the Atmospheric Turn*⁶⁶ –the organizers claimed that within the current interdisciplinary *atmospheric turn*, theatre has presented itself as an heuristic paradigm in which the social, material and political elements of atmosphere are thought to resonate, albeit in an idealised manner. Yet if the theatre had been adopted as a paradigm for “augmenting” or engineering atmospheres for a long time, why then, the organizers asked, does it present such an acute example of the “affective tonality” of aesthetic experience in today’s cultural obsession with audience participation (Thibaud 2011: 2014)? And why did Böhme’s “The Art of the Stage Set” – suggesting that atmospheres can be engineered rather

⁶⁶ Queen Mary University of London, 8-9 December 2017, coordinated by Martin Welton and Penelope Woods, in collaboration with Ambiances (Réseau International) and the *Journal of Sensory Environment, Architecture, and Urban Space* linked to Ambiances (ambiances.revues.org).

than just being contingent like the weather or the diffuse mood sensed in natural or urban environments – become a key text concerning the production and reception of atmosphere?

When I spoke to the participants of this conference, I mentioned that my company had been creating installations for years, without having heard of Böhme and an “atmospheric turn” – scenography of course always having implied a fundamental concern for environmental composition. And did not Kandinsky and Schlemmer, or the Russian constructivists and cosmists, take us deep into the technical/spiritual dimensions of architectural tonalities? Did not Eisenstein, from his drawings to the stage designs and films, explore the challenge how to reconcile elemental sensuality with forms of logic and artistic abstraction to produce “ex-stasis,” that nearly mystical foundation for aesthetic appearance? Spatial performance, music in particular, clearly generates affective tonalities and perceptual resonances that can link to metaphysical concepts such as the ecstatic. Böhme suggests that *ecstatic materialities* adhere to properties of *things*, and vibrant matter emerges along with what actors do or designers fill the stage with (1995: 33). There are many examples (in the European context at least since Appia, Craig, and Piscator; in the Latin American context one immediately thinks of Oiticica, Meireles and Neto) of theatrical spaces filled with tensions, their intensity contours tuned with uncanny, unnerving or soothing affect, with compelling rhythms, timbres, shadows, and presences. Appia’s staircases for Dalcroze’s staging of *Orpheus and Eurydice* in the Hellerau Festspielhaus (1912) spring to mind, since Appia’s concepts for “rhythmic spaces” and his radical ideas for environmental and indirect lighting (what he considered “creative light”) were path-breaking for 20th century design, influencing directors, choreographers and composers (from Bob Wilson to Kirsten Dehlholm, William Forsythe, Manos Tsangaris and Ragnar Kjartansson)⁷.

Scenographic exhibitions at the Prague Quadrennial have revealed such affective tonalities in works of designers who do not just build sets. Installations such as Tomás Saraceno’s *Biospheres* or Olafur Eliasson’s *Mediated Motion* or *The Weather Project* have drawn special attention to lighting, color, air and liquidity of materials, whereas sound artists, for example the Finnish group that created WEATHER STATION⁸ for PQ ’15, have been equally drawn to changing auralities subject to environmental conditions, harking back to John Cage’s aleatory concept of music as weather, inspired by his study of Zen and nature processes.

⁷ See Brandstetter and Wiens 2010, especially Birgit Wiens’s chapter on rhythmic movement and “Kreatives Licht” (223-54). Appia’s spatial experiments at Hellerau were conducted alongside Émile Jacques-Dalcroze’s eurythmics; the ideas for “gestaltendes Licht” (creative light) were implemented by Russian designer Alexander von Salzmann. See also Beacham 1993: 53.

Observers have pointed to German stage designer Katrin Brack’s recent productions, her minimalist yet excessive use of single materials – fog, foam, snow, confetti, balloons^{8,9} The use of stage fog as a special effect is common, but Brack’s filling the space continuum with dense and uncontrollable fog throughout the production of *Ivanov* (Berlin Volksbühne, 2005) alters conditions, making the fog a performer, so to speak, thus requiring the actors to improvise with the material spatial atmosphere, the “weather” conditions as they evolve and change, hovering, drifting.

Fig. 4 - Olafur Eliasson, with landscape architect Günther Vogt, *The mediated motion* – here a pond with floating duckweed that visitors can cross via pontoons. Kunsthaus Bregenz, 2001.



⁸ The Finnish Weather Lab, curated by Maiju Loukola, with Heidi Soidinsalo, Antti Mäkelä, Kristian Ekholm, Elina Lifländer, Nanni Vapaavuori, Antti Nykyri, sought to highlight the role of sound as scenographic material – sensual, spatial, performative and unexpected. PQ curator Simon Benham spoke of the *Weather* section as giving room to *wild spaces* of superimaginary processes.

Fig. 5 - Hélio Oiticica, *Penetravel Magic Square No. 05*. 1961. Museu do Açu (Museus Castra Maya) Rio de Janeiro. Photo 2000 © Projeto Hélio Oiticica.



Fig. 6 - *Ivanov*, scenography by Katrin Brack, premiered at Berlin Volksbühne, 19 March 2005. Photo: Courtesy of Volksbühne.



Such hovering presences, where atmosphere also *appears* uncontrollable, emergent and not engineered, evoke complex ontological and spiritual questions, and the wildness of nature – I

remember growing up as a child of dark forests and steep hills – is perhaps harbored deep inside our skin and bones, our muscle memory, internal perception and emotional conditioning. The wildness may also be imaginary – the forests, hills, and the fog a scenography of ghost stories, myths, and fairy-tales with which I also grew up and which is refreshed when I am exposed to the smell of moss, the touch of mist on my skin, or the aura of diffused light when sun beams flicker through tree branches, and hundreds of flies somersault. How are we to think, then, of trans-sensory hallucination as other than an effect of elemental materiality in contagious synaesthetic constellations?

The production of such atmospheric-auratic conditioning through design, with the phenomenological impact on sensory perception and also ethical perspective, namely how to react to affective presences and interact with lurking environments, thus points to an assemblage of becomings already explicitly at work in Cage's *Lecture on the weather* (1976) which, on one hand seemed unintentional (chance operations performed on Thoreau's *Walden* and *On Civil Disobedience*) while on the other gathered a storm of text fragments, images, music, voices and lighting. There was a score in Cage's aspirational lecture, and so we can also think of atmospherically orchestrated scenographies as audible-visceral environments that are not seen from the outside but are shared, taken in – they are meant to overtake us, perhaps in the sense of shamanic rituals where spirits are invoked to inhabit and possess us, heal us with their powers or make us dwell in a shared circle of continuous community (along with the ancestral spirits). A more recent example of such aural scenographies is *Der Klang der Offenbarung des Göttlichen* (Voxbühne Berlin, 2014), directed by Icelandic artist Ragnar Kjartansson and scored for orchestra by Kjartan Sveinsson: a four-part opera without performers, set on an empty stage filled only with slowly moving hand-painted tableaux vivants.

4 BODIES OF COLOR AND INTERCOURSES WITH WEATHER

Possession rituals involve trances that are often induced by music, drumming, chanting and dance, and in the visual anthropology of such trances we recall Maya Deren's powerful films she recorded in Haiti (*Ritual in Transfigured Time*, 1946; *Divine Horsemen: The Living Gods of Haiti*, 1977)^{9,10} In her writings Deren speaks of the intercourse with Vodou possession

⁹ Cf. Joslin McKinney's lecture "Scenographic Atmosphere and Spectatorship" at Staging Atmospheres: Theatre and the Atmospheric Turn, Queen Mary University of London, 8-9 December 2017.

ceremonies as transformational rituals that allow a de-centering of self, ego and personality (Nichols 2001: 8).

Such de-centering I associate with Fayen D'Evie's suggestions about blundering and be-holding, when she notes that her installations for vision-impaired audiences shifted sensory attentiveness to tactile and movement perceptions, encouraging "vibrational strategies" (d'Evie 2017: 48) for audiences that "lean" into the work differently through tactile and kinaesthetic entanglement. This leaning could also be considered central for *wearing* and incorporating (in terms of embodiment) exhibitions which choreograph audio-visual experience differently.

Here I am reminded of my experience of Hélio Oiticica's work in two drastically different environments. One was the major retrospective of his works at Houston's Museum of Fine Arts (*The Body of Color*, 2007), where I was invited to wander through an amazing consecutive arrangement of installations that encompassed Oiticica's paintings, reliefs, suspended three-dimensional sculptures, *Nuclei*, and *Bólides*, on to his *Penetráveis* (the architectural environments), and then the *Parangolés* (wearable color fabrics). The *Parangolés*, in particular, which we were invited to try on and wear, created energetic encounters with Oiticica's habitable cloth-objects (at the original opening in Rio de Janeiro worn by samba dancers from the *Mangueira* favela where Oiticica had studied the dance). I vividly remember the color-in-motion stimuli that also made these objects both actionable – in the sense that they had to be worn, manipulated and felt – as well as psychedelic, enabling me to drift off into the smell and sensation of the fabrics (their motion anticipating Oiticica's later sound-projection works of his quasi-cinema *Cosmococa*, 1973).

On the other hand, the Tate Modern (London) currently includes one of Oiticica's *Penetráveis* in a permanent collection exhibit seductively titled *Performer and Participant*. But the problem here is that I cannot participate but am shown a non-immersive history told through artifacts, display cases, photographs and documents. When I pass by an installation of Oiticica's *Tropicália* (Penetrable PN 2 "Purity is a Myth" and PN 3 "Imagetical," 1966-67), I don't even realize that I was allowed to walk in or lie down on the sand amongst the tropical plants, listen to the live parrots in the corner (recordings?) and feel the textures, light and ambience being formed if I were alone with them. No one else realized it either on the day I was there.

Fig. 7 - Visitors playing in William Forsythe's choreographic object *The Fact of Matter*, installation at *Move: Choreographing You*, Hayward Gallery, Southbank Centre, London, 2010 -2011. Photo: Alastair_Muir/Courtesy of Hayward Gallery.



This sense of being “alone” is perhaps a contradiction in terms, since immersion seems to imply a social and collectively experienced ambience, and also a permeable perceptual experience, a kind of intermingling, dreaming, or meditating – an experience I have, for example, when sitting on cushions with others inside Houston’s Rothko Chapel, surrounded by the painter’s fourteen monumental black canvases. After a while, I always close my eyes, as there is nothing to see in this vast monochrome stillness, in midst of these immense floating anti-mimetic and anti-naturalistic dark appearances.

Fayen d’Evie speaks of stories “told through blindness, with a vibrational narrative that will blunder amongst macro propositions, with intermittent be-holding of sensory recollections” (2017: 42), and her notion of *be-holding* is fascinating as she explains our grappling with fugitive, partial, hallucinatory, and tenuous “threads” in an aural environment, or an environment of sculptural objects that are touched and grasped, through the word’s etymological root (before the ocular), namely holding, handling, guarding and preserving. Such handling, in the curatorial practices d’Evie describes, means haptic engagement and interaction in the way in which she admits learning from choreographic practices, and in

particular William Forsythe’s recent “choreographic objects,” which she analyzes and then proposes to reorient through blindness (2017: 50-54). In her own work, for example during a residency in Moscow, she developed *Tactile Dialogues* (2016) with choreographer Shelley Lasica, inviting participants to share actions handling objects or architectural structures, giving attention to materials, temperatures, textures and tactile surfaces and also of course the kinaesthetic angles of encounters or navigations around the materials.

Fig. 8 - *Tactile Dialogues* (Vadim Sidur), curated by Fayen d’Evie and Shelley Lasica with Irina Povolotskaya, 2016. Photo: Evgeniya Chapaykina



The orientations and phenomenological instigations addressed in d’Evie’s provocative work with “handovers” and intersensory translations point to an important new understanding of kinetic atmospheres – and what d’Evie calls an “epistemology of hallucination” (2017: 58) – in their unfolding through affective connections that may not depend on, or exceed, conscious apprehension. The repertoires in dance which I have become interested in over the past years (butoh inspired and yet also strongly invested in digital practices of augmented reality) have indeed helped me to become more attuned to complex transitions between ephemeral performance, mediation, and design.

5 CHANGING REPERTOIRES / THE SUPRASENSORIAL SCENOGRAPHIC

In conclusion, I link the series of kinetic atmospheres created by DAP-Lab over the past few years to political questions raised by the METABODY project, wondering whether the aural and hypersensory dimensions I suggested are applicable in the sense in which Olafur Eliasson imagines the control of affective movement:

Like the weather, atmospheres change all the time and that's what makes the concept so important. An atmosphere cannot be an autonomous state; it cannot be in standstill, frozen. Atmospheres are productive, they are active agents. When you introduce atmosphere into a space, it becomes a reality machine. (Qtd in Borch 2015: 93).

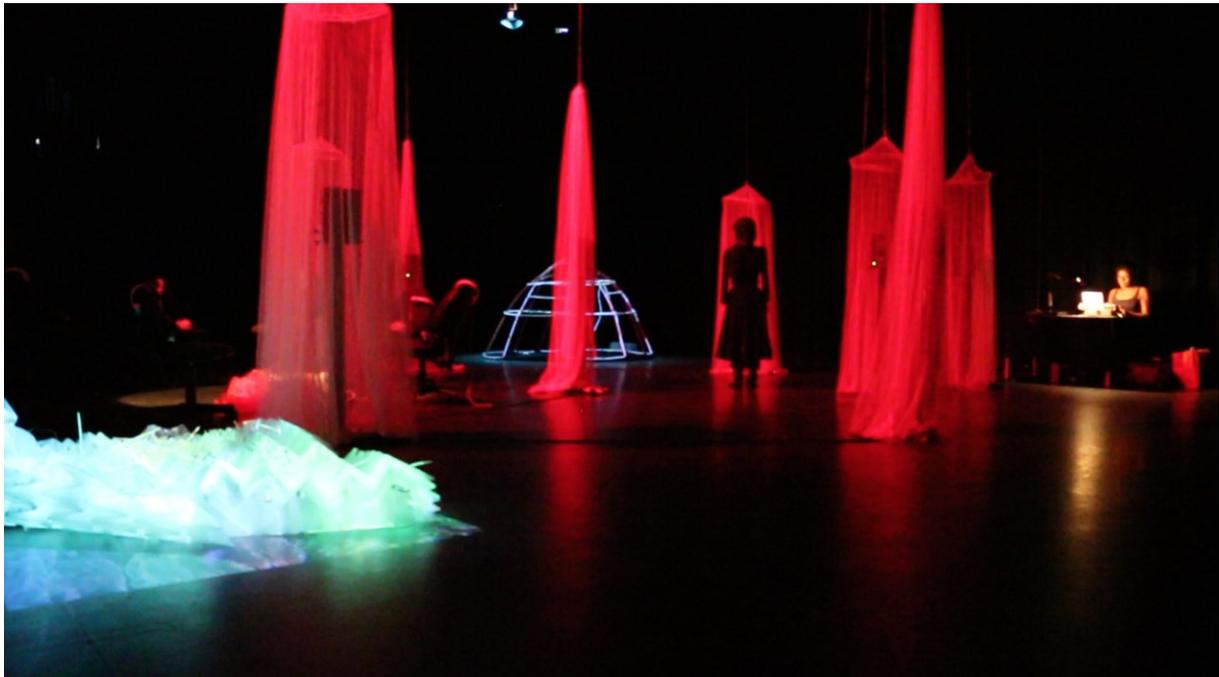
The idea of a reality machine is ambiguous, as Eliasson is aware of materials and their psychosocial content, and admits that productions of atmosphere are manipulative. It is also suggested that atmospheres can be made explicit (say, if they are normative) or ruptured, implying a Brechtian approach to becoming-atmosphere, pointing up its machining, its product-ness and not-inescapable social choreographic. METABODY took as its premise that bodily motion and non-verbal communication, understood as *changing repertoires of emotional expression and cognition*, constitute a fluid matrix of embodied knowledge in permanent formation. The in-forming diversity, however, is being undermined by the impact of digital information technologies which induce an unprecedented standardization of non-verbal, bodily and kinaesthetic communication processes. The METABODY project claims that a sustainable diversity is also undermined by the ways in which *design*, in an expanded sense (incl. Robotics, Biometrics, Virtual Reality, Human Computer Interaction, Ergonomics and Artificial Intelligence), reveals a problematic attempt to simulate and repeat reduced repertoires of human emotions.

Fig. 9 - Vision-impaired audience member touches dancer's costume in *metakimosphere no.3*, OrigamiDress design by Michèle Danjoux, 2016 © DAP-Lab



This suggests that the reality machine tenders repetitious and homogenizing scenographies (the aestheticized spectacular) whereas I was arguing on behalf of the sensual, the poetic and the subliminal. DAP-Lab's *kimosphere no. 4* introduced stations in a larger theatrical architecture where the real and the virtual merge, transitioning, handing each other over, with the virtual complementing the real in a tangible way as these realities are layered on top of and within each other. *Augmented virtuality* is introduced by a poetry game, "Red Ghosts," playable at a console by each visitor so inclined, their feet stepping on real leaves and twigs. The layering invites different experiences for each audience member, creating a sense of their own emerging views as they construct a narrative that flows through the collective body of the audience. "Red Ghosts" is also heard: a recorded voice speaks about lemurs – the moonlit acrobats of *Shadows of the Dawn* (a field report by primatologist Alison Jolly in Madagascar) – evoking an allegory of evolutionary migration, over millions of years. Such slow time/slow space was pertinent for the temporally extenuated experience we had devised for the theatrical environment of *kimosphere no. 4*. The atmosphere and the audience are the scenographic machine; the audience produces a sense of immersion for themselves, tuning into (or out of) a forest of sensorial stimuli they instantiate into their immersive experience of the installation.

Fig. 10 - *kinosphere no.4*: dancer Yoko Ishiguro, standing still inside one of the 8 ghost speakers; the coral reef is on the left, and sound artist Sara S. Belle performs in the background right. The skeleton of the Soundsphere is visible in the far back. London 2017 © DAP-Lab



Sound and tactile materials move this kinetic poetry, disseminate it around the architecture of the whole, with voices, electronic sounds, echoes, processed natural sounds, distorted crackles and hisses, lights, mists, colors and moving textures. The 8-channel installation, with each speaker shrouded in a mosquito net suspended from the ceiling grid, maps a kind a metaphorical forest of ghostly presences in deep red light (three dancers, wearing masks, are hidden inside, still or barely moving), with dense layers of a sound-in-motion that is experienced by visitors while moving around the forest of speakers – the micropolyphanies in fact only audible if they move across and between the nets, listening and absorbing. There are also stations on the perimeter: a VR-headset (goggles) and five lighter cardboard 3D headsets (with inserted iPhone); an igloo-like Soundsphere where visitors crawl inside to explore a GSR biosignal interface (listening to galvanic skin response turned into sound); and a coral reef sculpture where they can lie down and float inside a deep sea digital projection that percolates over a synthetic origami architecture.

Fig. 11 - Visitor floating inside coral reef and watery projection, *kimosphere no.4* © DAP-Lab



The ritual-communal aspect of immersion and participatory art is an important concern, otherwise there would be no reason to experiment with these forms of interaction. *Atmospheres* of suprasensorial design suggest a scenographic strategy involving the audiences to step inside and come closer, touch, listen and act in greater intimacy with unfolding actions. Our *kimospheres* are living, breathing spaces; they are currents felt through sonorous, tactile connections. One is corporeally present in them, moving through their *Stimmungen* (the German word *Stimmung*, similar to *Atmosphäre*, implies in its etymological origin also *Stimme*, i.e. voice, an acoustic experience, a tuning), perceiving-listening to the relational, dynamic flows. The surfaces and media require a creative investment from the audience, particularly obvious in the case of the VR “accessories” that need to be worn.

From projection to immersion – it is not a big shift as digital projections are a part of the installation architecture and also part of its lighting. 3D film or VR remains a cinematic projection medium, yet it has enhanced its plasticity and the illusion of absorption (of the viewer feeling being inside rather than looking from the outside in). 3D interaction designers argue that such absorption – and what our collaborator Doros Polydorou refers to as the perception of being physically present in a non-physical world – relies on the *plausibility illusion*, namely that you are not only using your body to perceive in the way you normally do, but that the environment believably responds to your actions to make you think it is real.

DAP-Lab's research on formative and wearable space¹⁰¹¹, on mediated and yet highly visceral environments that are not constructed in a stable form but evolve through movement, provides the basis on which I propose to look at current ideas about immersion-dance, perhaps also questioning those notions of *plausibility* (since they are to some extent ocularcentric). The kinetic, I suggest, includes motion of light, pixels and graphic projection, diffusion of sound waves, energy fields, color fields, implausible edgespaces and anomalies, objects that can be touched, handled, prodded and dragged, thus many different forms of embedded *motion sensing* which result in environmental reactions.

The idea of choreographic wearables I conjoin with the exploration of aural scenography, implying a material-sensory practice filtered through fashion design – making costumes, architectures, analog and digital accessories immersive and thus wearable. This *expanded choreographic* materially reproduces itself even when there is only breath (internal movement). Breath not only moves space – inhaling/exhaling, expanding/contracting – but also is audible. In all *kimosphere* installations the biophysical, etheric sound is amplified. The elemental thereness of the environmental atmosphere includes the audience as experiencers who are “inside” the atmosphere, and the atmosphere is in them. Both, so to speak, reciprocally make up the ecstatic materialities of the interaction (e.g. the porous gauze of the ghost speakers, or the fabrics and veils that link architecture to costumes: the insides-outsides or “interskins,” as Haein Song, one of our dancers, called them).

Their critical exploration would be the choreography: it includes intimate personal (meditative) resonances derived from the floating “coral reef” and the “Red Ghost” poetry game. Then there are the VR interfaces where visitors enter ghostly worlds via goggles. *kimosphere no. 4* thus combines two atmospheres, real architectural space and virtual (computational) space, both actuated through the same tactile narrative, neither perhaps quite plausible. We cannot know whether our visitors pick up the evolutionary tale of the lemurs migrating from Africa to Madagascar. The critical aspect for us is the immersant's sensory participation, letting the resonances of real and virtual spaces become rhythmically entwined.

¹⁰ Haein Song, a contemporary digital choreographer who has practiced for many years in *kut*, the traditional Korean shamanic ritual performance, recently completed a series of works that intermesh the traditional and the digital, and in her writings she describes the ritual techniques (*mugu*) deployed to achieve the desired collective healing and well-being effect of the practice: *Ecstatic Space: NEO-KUT and Shamanic Technologies*, PhD thesis, Brunel University London, 2018.

Fig. 12 - Visitor enacting/embodying what she perceives inside “Lemurs” forest interface with VIVE goggles, conducted by Doros Polydorou, *kimosphere no. 4*. 2017 © DAP-Lab



The occurrent gestures become reciprocal: pushing the kinaesthetic into a perceptual virtuality (VR) that so far is largely contained in the visual (the ergonomic challenges with VR headsets are well known; such accessories are tethered with thick cables to computers, thus a visitor putting them on has to be helped by a conductor). But also feeding the virtual “play” back to the corporeal, pouring it back into the player’s gestural action (Fig.12). The kinematic is the challenge for a VR scenography which does not insulate/isolate the immersant or focus on visuality but allows for an expanded synaesthetic entanglement where imagined full-body perceptual virtuality feeds back into the kinaesthetic. The momentary insulation from other visitors or friends, during *kimosphere no. 4*, turned out not to be a problem: everyone seemed patient, waited for their turn, observed, chatted and commented upon one another’s beholding, the “choreography” of walking into the lemurs’ forest, flying up trying to catch a glimpse of the moonlit acrobats.

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