



FAREWELL FROM THE OUTSIDE (2019): *View into the garden*

## JARDIN GLOCAL

A media ecological search movement within DE\GLOBALIZE

*“We don’t inhabit landscapes and gardens, but we inhabit a network of visible and invisible functions, relations, structures and aggregates made of metallic and artificial rocks.”*

Max Bense, cybernetician

*JARDIN GLOCAL*, the third part of DE\GLOBALIZE<sup>1</sup> within the EU research project *Clim`ability Design*<sup>2</sup>, brings us back to the Upper Rhine Valley. After India and Egypt, we return to our roots.

The DE\GLOBALIZE project arrives home in this final phase. At the end of 2019, we opened a *Garden of Cooperation* within the ABSCHIED VOM AUSSEN<sup>3</sup> exhibition. This six-week long project was a chance to pause and revolt in times where the digital and the global were coming together around the

topics of social injustice, migration and climate change. ABSCHIED VOM AUSSEN appears in the windowless space of a former swimming pool, and is conceived as the load area of a ship. The six-week long exploratory movement with an array of formats and encounters could only make use of the “on-board” materials. It was a collective process posing radical questions about colonial land acquisition and seemingly limitless expansions.

ABSCHIED VOM AUSSEN affects everyone: How can we understand the potency of a *nature* if the environment itself no longer exists outside, but envelops us in a cycle of becoming and decay to the point of indistinguishability? The dubious separation of nature and technology only became a factor once the conquering of the world had been set in motion. If we don’t take care, our fields grow out of control and turn into scrubland or a jungle that just can’t sustain all people. In the age of the *Anthropocene*, differentiating between *natural* and *cultivated zones* makes increasingly less sense. How shall we distinguish today between commanding nature and living in harmony with it? How should we deal with the primordial and *the wild* in our highly technological world, including within our very selves? How should we take care of (p)lots of land, which we exploit for

<sup>1</sup> <http://deglobalize.com>

<sup>2</sup> <https://www.interreg-oberrhein.eu/projet/climability-design-entwicklung-von-klimaanpassungskapazitaeten-von-kmu-in-der-oberrheinregion/>

<sup>3</sup> engl. PARTING WITH THE EXTERNAL <https://www.kunstvereinfreiburg.de/en/parting-with-the-external-a-search-for-the-terrestrial/>

economic gain and in which we also live? How can we understand and sketch the entanglements of media that make up our existence?

Ecology doubts on the exclusivity of human agency. It reflects from the outset the position of the observer. Media Ecology goes a step further, integrating radical entanglements of human media with the technical artefacts created. Approaches through the lens of Media Ecology transform media as tools, instruments and devices into formed material. Media are decomposed, reconstructed beings that have long since penetrated our senses and thoughts. The Media Ecological search movement JARDIN GLOCAL poses the question of what it means to *live in a network of visible and invisible functions* (Bense 1951).

We use the allegory of the garden to elaborate on this question. This represents the desire for order in a system that seems of its very nature to be disorderly to people, hence the urge to cultivate it. Half a century before the introduction of the concept of ecology by Ernst Haeckel in 1866, Goethe designated the *global garden as a leading metaphor for the togetherness of all beings and their relationships, beginning with plants and continuing through animals all the way to humans*. It is the attempt to achieve personal placement, the search for a place within an ecosystem and its organisms – within a network of entities, actors and actants. The search for a home.

In the final chapter of our *Search movement for the Terrestrial*, our focus pans from *Matters of Fact* in India via *Matters of Concern* in Egypt to *Matters of Care* in the Upper Rhine Valley. From matter and material via mater, the mother Earth, to the garden – *as a world within worlds lying at our feet*.<sup>4</sup> We see the garden as a laboratory in which we enter into a relationship with ourselves. A place moving between humanisation and exploitation, which often emerges surprising growths, interventions and processes. Above all, though, a topos giving rise to special observations.<sup>5</sup>

<sup>4</sup> Robert Harrison (2007) *Gardens - An Essay on the Human Condition*

<sup>5</sup> See Italo Calvino und Gilles Clément

<sup>6</sup> Details on the concept of the *Critical Zone* further below

<sup>7</sup> *We are compost, not post-human*. Workshop at the University of Cologne 2018

## 1. Lost Place

*You are like a lovely garden bearing precious fruit,  
with the rarest of perfumes;  
nard and saffron, calamus and cinnamon,  
and perfume from every other incense tree,  
as well as myrrh and aloes,  
and every other lovely spice.*

Song of Solomon, 4,13

Many cultures link the idea of happiness with the utopia of a paradisiacal garden – as a land in which *milk and honey flow*. Our earthly gardens on the other hand are places of inspiration and constant change, places of permanent care. They are a *Critical Zone*<sup>6</sup> comprised of their location, the activity of the gardener, the weather, the soil, the microorganisms, useful and damaging insects – myriad factors in other words.



Margaret Morton (1991): *Jimmy's Garden*

If we intend to turn this zone into a garden, we act creatively. We divide, form and imitate natural processes like selection, reproduction, fertilisation, growth and decay.<sup>7</sup> According to the writer Rudolf Borchardt we are inferior in this active relationship to a fundamental expanse between nature and the unreachable divine creator: *The garden exists right in the middle of this tension*.<sup>8</sup> The idea that mankind brings order to a garden is misleading. It is more the case that they place themselves as a gardener within an expansive relationship with nature. With her tools, humans are only ever one actor among many, which is why the sociologist Bruno Latour urges us not to *overlook the earthworm*.<sup>9</sup>

<sup>8</sup> Rudolf Borchardt (1938): *Der leidenschaftliche Gärtner*

<sup>9</sup> Article by Bruno Latour in the exhibition catalogue *Sieben Hügel – Dschungel (2000): Übersehen wir den Erdwurm nicht*

Protecting and processing, nature and culture coexist in a chiasmic relationship; we act creatively in nature and with nature. This means that gardening is a forceful, arbitrary act that takes place and destroys selectively in a series of existential processes of *segmentation and sequentialisation*<sup>10</sup>. Each intervention creates a habitable space and a niche for certain plant and animal species. Caring for crops rests on the creation of a microcosm within a macrocosm. Many gardens turn into a bubble within an overriding foam construct.<sup>11</sup> These bubbles appear in time, through time and are always inherent to time. Gardens are a mirror image of the soul and life; they require work and care. Every garden needs at its heart experience (*matters of fact*), participation in contexts (*matters of concern*), as well as nurturing and attention (*matters of care*).



FAREWELL FROM THE OUTSIDE (2019): *Garden shed*

For mankind, the paradisaical garden is a lost place. Through expulsion from Garden of Eden after the original sin, we lost not only our innocence and basic sense of trust, but also our home. The original garden can therefore be understood, like *Gaia*, as *something greater than the sum of its parts*. A *super-organism* without bounds, a hypothetical whole that defies all division. Modern separation theories result therefore in processes of alienation and a series of insults.<sup>12</sup> What remains is the yearning for a reliable basis for living, a home<sup>13</sup>. This is why we became gardeners<sup>14</sup>.

## 2. Gardens of Modernity

The era of *modernity* reacts to people's loss of home and trust with a distanced view from the outside.

<sup>10</sup> Concepts by Klaus Theweleit

<sup>11</sup> <https://www.zeit.de/2004/21/ST-Sloterdijk/komplettsicht?print>

<sup>12</sup> Initially cosmological (Copernicus), than biological (Darwin) and finally psychological (Freud) [https://de.wikipedia.org/wiki/Kr%C3%A4nkungen\\_der\\_Menschheit](https://de.wikipedia.org/wiki/Kr%C3%A4nkungen_der_Menschheit)

<sup>13</sup> See Bruno Latour on Heimatbegriff in <https://www.zeit.de/2019/12/heimat-begriff-globalisierung-nationalstaaten-herausforderung>

The first steps along this path extend back to the 16th century with Copernicus and Galileo. Darwin and Freud<sup>15</sup> followed in the 19th century, culminating with *Sputnik* and the picture of the *Blue Marble*. The separation of mankind from paradise was not, according to Bruno Latour, carried out entirely consistently: it is defined by the strict dualisms of subject and object, nature and society, animal and human, mind and material, feeling and sense and, finally, art and science. This dualistic thinking leads directly to ecological catastrophe, because it becomes impossible to conceive of *hyperobjects* and *hybrids*.

The worldview of modernity is reflected for example in the philosophy of the garden (*hortus* in Latin) as a walled-in and enclosed gem. As with every cell and every *system*, this displays both an inside and an outside. Our research focuses on the *Inbetween*, a zone of indistinguishability. In the Renaissance, the concept of form in the garden was seen through the lens of conquest, of taking over and colonising that which lay beyond. The Renaissance garden succumbs to a clear order. The surrounding landscape is understood as a natural beyond, forming the same basic composition as the artificially formed inner creation<sup>16</sup>.



Hieronymus Bosch (1490): *Garden of Earthly Delights*

The Baroque garden takes a large step forward and grounds its concept of order strictly in the rules of sense. The natural world is subordinated to pure form with *maximum force*; the potentially anarchistic forces of life are brought under control in its structure<sup>17</sup>. The French thinker Saint Simon defined this approach as *ce plaisir superbe de forcer la nature*<sup>18</sup>.

<sup>14</sup> Gardeners in the sense of documenters, artists, programmers, medics, geologists, and meteorologists: see authors.

<sup>15</sup> The age of modernity begins with Copernicus and Galileo's view of the beyond, and with great divisions.

<sup>16</sup> Edith Wharton (1904) *Italian Villas and Their Gardens*

<sup>17</sup> Robert Harrison (2007) *Gardens - An Essay on the Human Condition*

<sup>18</sup> In English: this great joy in exercising power over nature

Nature as something beyond human should not only be tamed and subdued, but humiliated and raped—well and truly defeated.

From the outset, surveillance and control are the basic motives of modernity. The ideal Baroque garden has a centre, the ruler, and a clear border with the surroundings beyond. Centre and border are intentionally accentuated in the design. In Baroque gardening, geometry and symmetry along with a centralised perspective are dominant as an embodiment and instrument of power, and expression of hubris and control<sup>19</sup>. Visitors to Baroque gardens have the sense of being a lost coordinate in the over-ordered system of a monarchical creator in which no unrecognised or *functionless* wandering or situationist *dérive*<sup>20</sup> is possible. Even the geometrically integrated labyrinthine constructions subjugate the process of *getting lost* to a systematic logic.<sup>21</sup>



Stanley Kubrick (1979): *Designing a Garden*

In the philosophy of Gottfried Wilhelm Leibniz (1646-1713), the algebraic combinatorics of computers is conceived in the same manner as the Baroque garden. Leibniz contributed over a number of decades the design of the *Großen Gartens von Herrenhausen* in Hannover – especially its canal layout and water features. The Baroque layout is for him a place of reflection<sup>22</sup>, of activation and conversation. Working on the idea that nature functions like a perfect clock, he reasons that thinking and knowing are entirely attributable to mathematics. The *mathesis universalis*<sup>23</sup> reflects the divine order of a *preestablished harmony*. The philosopher expresses a radical thought: all numbers can be described through a finite sequence of 0 and 1. With the binary number system, he develops the philosophical basis of

digital processing two hundred years before its electromagnetic implementation. Leibniz can therefore be seen as the founder of the digital garden. Digital and material, culture and nature, number and world are united in a universal process of gardening.

The ideological basis of the Baroque garden tends in its layout to assume forced features. Contrary to today's manner of seeing, the straight line acts as an expression of the *natural*, while a wavy line is accorded a sense of artificiality<sup>24</sup>. Baroque garden layouts prove themselves to be a *grounding* and anthropomorphisation<sup>25</sup> of the divine perspective, within which earthly representation is found.



BUZZ (2014): *Scientific observation of a garden*

The landscaped garden is a counter reaction to the geometric strictures in the 18th century, giving the illusion of an open expanse in the form of intertwined paths and implicit visual axes. The ideal, according to the art historian Horst Bredekamp, is the invisible transition to surroundings that make *the garden appear as nature, and nature appear as the garden*. The strength of this concept is the splendid appearance of dissolved boundaries. We are embedded and become an integral part of the expanse. The surroundings provide a home, and become an *oikos* (οἶκος, Ancient Greek)<sup>26</sup>, an environment. The view from outside turns *ecologically speaking* inwards to a degree, becoming intrinsic to the garden. Contemporary thinkers criticised this: Goethe saw English grounds as *inhibitory* and *ridiculing* of nature; Hegel, the philosopher, bemoaned the *lack of inner conflict* and *thread-like artificiality*<sup>27</sup>. The suggestion of freedom and naturalness in these gardens were obviously ideologically suspicious at the time when these gardens came into being. Romantic gardens

<sup>19</sup> The interplay between linear perspective and control is the basis for Peter Greenaway's (1983) *Der Kontrakt des Zeichners*

<sup>20</sup> To understand the parasitic, see Michel Serres (1980) *Der Parasit*. On the practice of *dérive*, see <https://en.wikipedia.org/wiki/Dérive>

<sup>21</sup> It is no coincidence that the first computer games like *Pac Man* (1980) take place in a labyrinth

<sup>22</sup> Horst Bredekamp (2012): *Leibniz und die Revolution der Gartenkunst*

<sup>23</sup> [https://en.wikipedia.org/wiki/Mathesis\\_universalis](https://en.wikipedia.org/wiki/Mathesis_universalis)

<sup>24</sup> *Biography of Leibniz in Annalen der Gärtnerey, 1795*

<sup>25</sup> <https://en.wikipedia.org/wiki/Anthropomorphism>

<sup>26</sup> The medic and zoologist Ernst Haeckel introduced the concept of surroundings, environment and milieu in 1866 with the term ecology.

<sup>27</sup> The landscape does actually have a natural boundary. Just like the membrane of a cell represents a border, the area of a garden also has a border – although an organism like a plant will never keep to this border. The earliest gardening culture in human history is the first step towards nationalisation and with that the creation of a here and there, a we and they, the garden and the wilderness. A first step towards a catastrophic view of things: a quasi-symmetry. See Michel Serres on this point: *Das eigentliche Übel* (2007)

heighten this manipulative tendency by giving the visitor feelings of mortality and transience. Both the landscape garden and Romantic grounds remain full of contradictions – above all as regards their apparent borderlessness and therefore their *framing*. Painterly depictions of landscape gardens should not *portray the picture of unfettered nature, but the artificial picture of ideal nature* (Bredenkamp 2012). The Baroque garden is placed neither in opposition to nature, nor does the landscape garden emerge without geometric construction.

With the classical modernity of the 20th century comes the belief in technology and *artificial stone*. Max Bense alludes to the silicone of processors that make Leibniz's intellectual game a reality on our smartphones today. Functionalism transforms the city gardens of the 19th century organistically into *green lungs* for crowded centres and industrial quarters. Their artificiality is barely contested these days. So-called green spaces became a central component part of a transformed and convenient urbanity, to *cool oases* in an overheated city climate, and finally to a basic element of a *blue-green infrastructure*<sup>28</sup>.



PEAU/PLI<sup>29</sup> (2012): *Biospheric Stroll through an urban garden*

Since the appearance of cybernetic technoculture in the 1960s, the concept of nature has been replaced by the concept of the *environment* and the *system* in many areas. *Environmental design* suggests an ability never seen before to plan and control the henceforth global garden as a holistic structure of a *Whole Earth*<sup>30</sup>, conceived as a controllable biosphere with inlets and outlets. Manned spaceflight with its fantasy of settling far-away galaxies goes hand-in-hand with the credo of the hippy culture of being *outsiders*. *Expanded consciousness* through taking drugs correlates with the computerisation of daily life in a similar manner<sup>31</sup>.

The hubris of the feeling of green living today recalls the 1978 observation of Jean Baudrillard: *The economic system is getting punched in the face, and that's why it's inventing ecology*. After realising the scarcity of *nature's* resources after the oil crisis, the *environment* took its place in economic and cultural life as the systematic entity. The environment is then described as a purely symbolic semiotic system and is therefore open to manipulation through its design. Above all, it is tradable and exploitable, just like the consuming human living within it. Around 1970, the dissolution of gold as a currency standard correlated with the dissolution of nature as a standard in ecology. According to Jean Baudrillard, the real object was replaced by a *system of circulation without reference*<sup>32</sup>. Neoliberalism and neocapitalism decouple the resource from its symbolic description. As economic symbols now refer self-referentially to other symbols, limits are no longer placed on their growth<sup>33</sup>. This capitalist answer to the *Club of Rome* (1973) is still today at the core of the so-called *environmental movement* and its ecological understanding of nature.

With the rise of this systematic world model, the accessibility and ability to frequent so-called *recreational areas* has become a mark of *environmental justice*<sup>34</sup>. In the course of this development, allotments<sup>35</sup> have mutated from topos of survival to secure sustenance in the image of an old farmer's garden into a social leisure and meeting space. From hipsters to *yuccies*, the (small) garden has become a refuge, an edge, a zone, a breakline, an oasis to enjoy at the weekend or in the evening. It compensates body and soul for the alienation of modernity, the destruction of the closed world, the divisions mentioned above and the decentredness in the immensity of the wider world. It *grounds* a person.

<sup>28</sup> <https://de.ramboll.com/services/stadtplanung-und-gestaltung/blau-gruene-infrastruktur>

<sup>29</sup> Performance PEAU/PLI mit dem Tänzer Graham Smith 2012, siehe <http://is.metaspace.de>

<sup>30</sup> [https://en.wikipedia.org/wiki/Whole\\_Earth\\_Catalog](https://en.wikipedia.org/wiki/Whole_Earth_Catalog)

<sup>31</sup> As shown by Lutz Dambeck in the film *Das Netz* (2004)

<sup>32</sup> "The Great Signified, the Great Referent Nature is dead, and what takes its place is the environment, which points out both nature's death and its reconstitution as a simulation model (reconstitution, as of a pre-hashed beef-steak)." In: Jean Baudrillard: "Design and Environment.

Or, The Inflationary Curve of Political Economy", in: Emilio Ambasz (Hg.): *The Universitas Project*, 50-66, 62

<sup>33</sup> Florian Sprenger (2019: 331 ff) has summarised these correlations in terms of the lifting of the gold currency standard in 1971.

<sup>34</sup> [https://en.wikipedia.org/wiki/Environmental\\_justice](https://en.wikipedia.org/wiki/Environmental_justice)

<sup>35</sup> Allotments serve ecologically to reduce noise, bind particulates, green spaces, break up the built area, achieve conservation, connect living space, and produce climatic effects. See: [https://en.wikipedia.org/wiki/Allotment\\_\(gardening\)](https://en.wikipedia.org/wiki/Allotment_(gardening))

Originally, a garden was understood as a parcel of land divided into four parts, and structured through water, architecture, plants and animals. Surroundings, though, are never independent and clearly sectioned off, but dictated through each embedded element by their interactions, chains and networks. Lynn Margulis' concept of nature as *symbiogenesis* considers myriad critical neighbourhoods between living and dead material, which are deeply intertwined with each other. Peter Sloterdijk speaks in this context of *environmental reversal*: what surrounds becomes the surrounding environment, the latent becomes explicit, and the natural is made artificially in biosphere greenhouses.

Put in terms of media-ecology: as observers, we are ourselves part of the observation. We cultivate and are ourselves part of the field. In contemporary thinking there is no longer any external observer looking from outside at any one thing. *Quasi-objects*<sup>36</sup> like climate change remain in their great complexity inaccessible as a result of the idea of a separation between inside and outside. Where transitions are fluid, the borders must still remain clear. Each cell has an inside and an outside, each parcel is marked out, each place has its special characteristic and each milieu envelops and needs protection<sup>37</sup>. The ambivalence of the border therefore requires a new view of things and their framing. Seen in terms of Sloterdijk's notion of *environmental reversal*, landscape defies all conventional attempts at framing. In film terms, this corresponds to a questioning of the framing of a picture. But how can we imagine a modified ecological view of the world, or that of a garden? How must our view of this reverse if we want the means of filmic representation to think otherwise?

To achieve such a *hyperobjective worldview*, the philosopher Timothy Morton suggests a zero-people-perspective intended to do away with the Renaissance control paradigm of a centralised perspective. A way of viewing that interprets the world outwardly, and gives things a voice. The view of a *zero-person* doesn't perceive objects in terms of their materialistic relationships or revert to objectivised perspectives according to the definition of the

philosopher Graham Harman<sup>38</sup> – in so far as it's possible to speak of viewing in this context.

Simultaneously this concept inhabits a kind of hubris of form instead of allowing control to subside and assuming individual vulnerability. Even a zero-people perspective can only ever occur partially. Its disembodiment is problematic and should not be allowed to tip in the direction of *spinach ecologism*<sup>39</sup>.

According to Karen Barad, we are talking here about *agential slices*<sup>40</sup>. The physicist and STS theorist puts this concept in opposition to *Cartesian* slices, the logic of distancing, the aerial view of things, and the centralised perspective. *Agential* slices repeatedly mix culture and nature, living and non-living, organic and inorganic via action and refraction. Topologies of becoming and doing or shrinking and penetration, stand in opposition to topographic models of control and use. In the search for a participative *representational form* reflecting media-ethnographic experiments in *sensory ethnography*<sup>41</sup>, the WASTELAND<sup>42</sup> project worked with environmental inversions from 360° videos in the form of stereographic projections.

<sup>43</sup>



WASTELAND<sup>44</sup> (2016): *Garden Talks at Garbage City in Cairo*

Measurements are, by their very nature, *presumptuous*. The coordinate system of a Baroque garden, in which we must align ourselves, corresponds to the

<sup>36</sup> Concept by Michel Serres. Seeing the stone as a quasi-object, Serres makes clear the senselessness of the separation of spirit and material: The whole of Islam dreams of going to Mecca, where the black stone is kept in the Kaaba. The modern economy was born in the Renaissance. Stones fall. Why did Jesus found the Christian church on a man by the name of Petrus (meaning stone)?

<sup>37</sup> A great Bordeaux is not the present of gravel ground, but a terroir, as Régis Debray says.

<sup>38</sup> C.f. Graham Harman, Zero-Person and the Psyche, in: David Skrbina (Hg.), *Mind that Abides. Panpsychism in the New Millennium*. Philadelphia 2009, S. 253–282.

<sup>39</sup> A concept from Joseph Beuys, who warns against a simplistic concept of ecology: "Trees aren't important for maintaining life on this Earth. This spinach-ecologism is of

no interest. No, trees are needed to save the human spirit."

<sup>40</sup> Agential slices remove inherent ontological vagueness according to Barad, so different entities like the body, subjects and objects can come into being. The phenomena exposed through this process are epistemologically the smallest material entities (Barad 2003: 815ff); apparatus and experimental superstructures are also phenomena (Barad 2012: 23ff.).

<sup>41</sup> [https://en.wikipedia.org/wiki/Sensory\\_Ethnography\\_Lab](https://en.wikipedia.org/wiki/Sensory_Ethnography_Lab)

<sup>42</sup> Fetzner/Dornberg (2016), see <http://waste.metaspace.de>

<sup>43</sup> The projection method used harks back to early Earth measuring and portrayals of the world by the geographer Claudius Ptolemy.

<sup>44</sup> <http://waste.metaspace.de>

contemporary network of our digital garden with its global positioning system (GPS). As well as position, feelings and preferences are measured and calculated. We use our technical devices and they use us. In digital gardens, hosts and parasites do not often change role. So it's worth asking: who is observing or parasitising whom in this situation?

We are always both at the same time, observer and observed, parasite and host, on which basis the philosopher Michel Serres encourages us to agree a new contract in the Anthropocene with nature, the last host. GAIA in all its symbiogenetic glory is the last remaining garden in our world<sup>45</sup>. Our first and last abode. DE\GLOBALIZE builds on this concept.

### 3. Geography

Thanks to their enclosure, gardens achieve a tangible, small-scale space and protective dimension as a matter of course. As a conceptual figure, metaphor or allegory, a region can also be understood as similar space<sup>46</sup>.

The Media Ecological search movement JARDIN GLOCAL focuses on the Upper Rhine Valley<sup>47</sup>. This is part of the so-called *Transeuropean Mediterranean Mjösen Zone*, a geological rift extending for 2000 km in length from the Mediterranean up to the Oslo trench in Norway. This trench is, alongside the East African and Jordan rifts, one of the world's most prominent examples of its kind. A large tear that, to our manner of seeing, appears as many small fissures of living space<sup>48</sup>.

<sup>45</sup> The biologist Lynn Margulis describes the surface of our planet as geophysiological. Gaia is expansive, sophisticated, aesthetic, extremely old and extremely resilient.

<sup>46</sup> Among contemporary garden fantasies are virtual creations like Jurassic Park, sci-fi films like PHASE IV and Westworld, and cyberspace with its n-dimensional experience space. Experimental worlds like Biosphere 2 or the Europa Park Rust theme park in the Upper Rhine area can also be understood as gardens in the national stereotype of the ecological-autarky of survival space and highly commercialised "funscape". Forms of discipline and origin have long gone hand-in-hand with entertainment.

<sup>47</sup> [https://en.wikipedia.org/wiki/Upper\\_Rhine\\_Plain](https://en.wikipedia.org/wiki/Upper_Rhine_Plain)

<sup>48</sup> Geological causes for the generation of the rift zone occurred over 50 million years ago, and included tensile stress leading to a stretching of the Earth's crust; this caused thinning. The surface above sank down, forming the Black Forest and the Vosges. Within this geological weak zone there was marked volcanism, which led to the creation of the Kaiserstuhl among other formations.

<sup>49</sup> At the edges of the rift, hot and in some parts mineral-rich sources were and are used for spa and healing purposes. Such spas form a row along the edges of the Upper Rhine Graben. In earlier times, the geothermal gradients were used as geothermal energy sources. However, the cracks in the ground, in houses in Staufen, and other accidents besides show that new problems are arising when earthworks run out of control. The geological basis of the area is prone to earthquakes. The biggest in history was in Basel in 1346. It is no wonder that there is close

The Upper Rhine aquifer, formed in Pleistocene sediments of gravel, sand and rubble, is one of central Europe's biggest groundwater channels with an estimated volume of 45 billion cubic metres<sup>49</sup>. Frequent earthquakes and earthquake hazards are further facets of JARDIN GLOCAL in the Upper Rhine.



Wyhl (1976): *Opponents of nuclear power occupy the garden*

The supply of Mediterranean air masses through the *Burgundian Gate*<sup>50</sup> gives this garden an unusually mild climate<sup>51</sup>. The Upper Rhine area is currently noteworthy for its many ecology *criticalities*. The climate crisis is leading to a significant increase in thermal load, particularly in urban agglomerations. Seasonal accentuation of precipitation is also being measured, along with the increasing risk of flooding in winter. In summer, an increase in heavy downpours with corresponding floods and landslips is expected, as is an expansion of dry phases and droughts. Even the essentially good water supply is likely to suffer difficulties in drought summers<sup>52</sup>.

seismic measurement of the area with nuclear power facilities in the region.

<sup>50</sup> [https://en.wikipedia.org/wiki/Belfort\\_Gap](https://en.wikipedia.org/wiki/Belfort_Gap)

<sup>51</sup> In the southern Upper Rhine area, advertising slogans like "The Tuscany of Germany" or "Germany's Balcony" are common. The mild climate encouraged settlement in prehistoric times. Celtic cults settled in the Black Forest and the Alsace Belchen and used the view of the Graben and the groundwater resources for their rituals – the so-called Belchen System. Under Roman rule, transport routes formed along the Graben and the Rhine itself which are still today the main arteries of industrial and goods flows for the this prospering economic region spanning from the North Sea to the Mediterranean.

<sup>52</sup> Historic and modern mining and extraction of resources has led to corresponding changes in the appearance of the landscape and also to huge amounts of residual waste. Furthermore, the loss of biodiversity is advancing at pace, and new species are joining the plant and animal mix to cause further damage to the existing flora and fauna. On top of this is the problem of microplastics in the sediments of the Rhine. Pollution caused by an excess of slurry leaching and widespread use of pesticides and herbicides is also high. The dying out of insects and bees are obvious markers of these dramatic developments in JARDIN GLOCAL. Another issue is the pace of economic development and high demand for housing, which is leading to surface covering that is unsustainable. This is happening at a rate of 60 hectares per day, which is about twice the rate of comparable countries. New infrastructure is cutting up the landscape with increasing

We understand the Upper Rhine Valley<sup>53</sup> in our exploratory movement as a garden<sup>54</sup> in desperate need of new cultural and economic forms in times of climate change and global migration, to maintain its quality of living and to increase its resilience<sup>55</sup>. A special feature of the Upper Rhine is that the border has long been manipulated. Mülhausen was for a long time Swiss, and the Alsace a part of Germany. This engagement with different (gardening) cultures is an important experience of complexity and hybridity.

The area is therefore a region of multiple political-territorial changes. Ecologically speaking, the area became rather damp and malaria-infested as a result of the straightening of the Rhine by Tulla and Honsell in the 19th century. It became a *gardenland*, as the British world historian David Blackbourne has fittingly described it. The straightening of the river course allowed for navigation, but also for the delineation of borders, protection against flooding, and for the reclamation of land. In the industrial age, this was also an example of *control over nature*, of inward domestication and colonisation while the outward European policy was to claim other continents to secure raw materials. It wasn't until the first big environmental disasters such as forest dieback, the Sandoz chemical spill and the Chernobyl catastrophe in the 1980s that the first big ecological protests took place against the planned atomic facility at Wyhl in the middle of the Upper Rhine Valley. From this grew the anti-nuclear movement and subsequently the green movement. Concepts of

---

rapidity, meaning the ecological footprint is correspondingly very high in the JARDIN GLOCAL. The aim is to reduce this level of land requisition to 30 hectares throughout the country. In their concept of load limits for the planet, Rockström et. al. 2009 described to impressive effect the overreaching of nature's ability to regenerate itself on the global level. If we use a garden, material and energy flows must be kept in balance through considerate and appropriate i.e. sustainable gardening practices. What is removed must be balanced out with fertilisation and treatment. In effect we have not only overstretched the garden, but also already damaged it with our rapacity.

<sup>53</sup> It's true to say that rewilding, as is happening along many rivers at the moment, is compensation for new infrastructure. FFH Natura 2000 or the EU's Water Framework Directive are examples with a holistic approach, and the designation of protected areas such as the Nationalpark Nordschwarzwald also show promising progress. Sustainable forestry and organic farming are also making a contribution, just as Smart Growth and Smart City concepts aim to keep farming within limits suiting the common good. Many new concepts and legal measures such as eco accounts are also contributing to regeneration.

<sup>54</sup> The Upper Rhine Graben lies in the middle of the European banana, a highly industrialised especially densely populated economic zone between Manchester and Milan. In the section between Basel and Karlsruhe, this banana is embedded between the Black Forest and the Vosges.

<sup>55</sup> We could also speak of an ecosystem that we are consciously avoiding at this point. The concept is highly convoluted and full of the misleading promises of modernity.

*sustainability* as well as the rethinking and transformation such as *rewilding* measures are becoming part of a new hubris: the saving of the world.

#### 4. Matter of care. The Critical Zone

After expulsion from the garden of paradise, man cultivates the Earth's crust *in the sweat of his brow*, in order to turn it into a productive garden. Farming becomes equated thence as a battle against nature, meaning that people must give the Earth more than it can demand from them. It is only by taking care of land that land can provide sustenance. If not, the *Critical Zone* is reached and threatens to eliminate us.

In recent years an interdisciplinary academic branch has developed around the concept of the *Critical Zone*<sup>56</sup>. It researches the thin, few kilometres-thick air and water-bearing layer that surrounds our planet. Geoscientists, biologists and environmental scientists explore this skin layer in which all life occurs. Just 15 km above and below – everywhere where there is water. It is critical because this is the zone where human life and that of many other species is in *balance*, and can become *critical*. For this reason, the *Critical Zone* must be cared for.

The Upper Rhine Valley and its peripheral zone are part of what has meanwhile become a worldwide area of *Critical Zone research*<sup>57</sup>. Because of its mild climate, the region is all the more affected by climate change<sup>58</sup>. JARDIN GLOCAL's<sup>59</sup> artistic research understands the Upper Rhine Valley to be a *Critical*

<sup>56</sup> See the exhibition by the same name at the ZKM Karlsruhe, curated by Bruno Latour <https://zkm.de/en/exhibition/2020/05/critical-zones>

<sup>57</sup> In Strengbach/Auburne in the Vosges, one of the first Critical Zone observatories was founded in 1983 – somewhat *avant la lettre*. Its aim was to research acid rain.

<sup>58</sup> In the Rhein area we are experiencing increasingly hot and dry summers, whereas the slopes of the Black Forest and the Vosges are increasingly affected by heavy rains. In the higher reaches, the fall in the number of days with snowfall is leading to a critical situation for winter sports, stemmed only by technical measures such as snow machines and powerful lifts that can also be used in the summer months. Water parks and climbing and bouldering halls are attempting along with indoor play areas to achieve some sort of balance. Which natural gardens and landscape worlds will emerge from these new oases? The palm gardens of water parks, the grottos and the waterfalls – they aim to impart an exotic illusion of relaxation and leisure – an experience close to nature in an artificial garden.

<sup>59</sup> In the context of *Clim'ability Design* the artistic research carried out through LE JARDIN GLOCAL in collaboration with the Institute Environmental Social Sciences and Geography under the leadership of Prof. Dr. Rüdiger Glaser and the Institute for Geo- and Environmental Sciences with Prof. Dr. Andreas Christen at the University of Freiburg. A further partner is the Centre for Psychosomatics and Psychotherapy at the St Josef's Hospital in Freiburg under the leadership of the psychosomatician and philosopher Dr. Dr. Martin Dornberg.

Zone and therefore takes a media-ethnographic perspective. Along with Michel Serres, we ask how we can represent and map this garden in a media context, and how ecological processes take place within it. How can we explain the geographical requirements of this construct topographically in accord with these other factors? How can we portray complex materials and structural representations through media and help SMEs to pursue adaptation to their business models using media-ecology? To what extent can the Upper Rhine be thought to this end in terms of gardening?



DEVGLOBALIZE (2019): *Laboratory garden with Indian geologists*

## 5. Clim'ability Design

Even grounds of great size and distance from nature can become gardens. JARDIN GLOCAL is part of the EU research project *Clim'ability Design*, which is pursuing cross-border research into the effect of climate change on SMEs in the Upper Rhine area. People, animals and plants along with industrial manufacturing processes, supply chains and trade routes must adapt to changing climatic conditions.

SMEs are often found in clusters known commonly as industrial estates (industrial parks in French and German). A literal euphemism. These areas resemble plantations more than gardens, as they are designed to exploit and amortise more than support

sustainability and heredity. The term *industrial ecology* puts forward a new approach to *industrial rationality*.

The *Freiburg Institute for Geo- and Environmental Sciences* researches the micrometeorology and the dynamics of the atmosphere in close proximity to the ground. Here the exchange of energy, water and trace gases between complex land surfaces (forests, cities) and the atmosphere is measured and modelled. In collaboration with the German Weather Service (DWD), the researchers are developing a new automatic network of self-learning mobile sensors as part of *Clim'ability Design* called the *Mobile BioMeteorology System* (MoBiMet System).<sup>60</sup> It combines the building of data through continuous recording of parameters such as temperature and humidity with social-anthropological fieldwork documentation about working practices<sup>61</sup>.

The result is a global and local network and with that a diagnostic, prognostic and factual functionality. In the age of *data and drones*, the discipline and practice of monitoring is turning into an ever more fluid task<sup>62</sup>. Production facilities, climate data and ecosystems are being linked together to drive bio-politics on a grander scale. The aim, according to Michel Foucault, is to model defined populations in particular through the regulation of their health and their working and living conditions<sup>63</sup>. When it comes to organising life and work, subjects are always measured according to norms<sup>64</sup>. *Integration* into ecological environments plays a central role in this process, where the individual's own changing behaviour becomes a factor. *The westerner is learning gradually what it means to be a living species in a living world, to have a body as well as existential requirements that we can modify, and a space in which to divide up these requirements in the most efficacious way*<sup>65</sup>.

Our gardens have long been the subject to the *whims of the weather* that acts as a primary global force. Climate change demands academic research to achieve reliable prognoses of factors that are becoming increasingly difficult to calculate. Global

<sup>60</sup> The system gets climate data from 120 different workplaces in the Upper Rhine such as temperature, humidity, wind speed, radiation and light intensity and can mark these with location codes. These data are combined using self-learning algorithms and computer systems with other meteorological data and can therefore be used in real time both diagnostically and for weather forecasting. Behind this is an idea to gather weather data in order to create the ideal working conditions for people and businesses, and in turn to enable adaptation to the local weather characteristics. Figuring amongst these datasets is the Universal Thermal Climate Index (UTCI) see: [https://www.wetterdienst.de/Deutschlandwetter/Thema\\_des\\_Tages/878/utci-universal-thermal-climate-index-universeller-thermischer-klimainde](https://www.wetterdienst.de/Deutschlandwetter/Thema_des_Tages/878/utci-universal-thermal-climate-index-universeller-thermischer-klimainde)

<sup>61</sup> The predecessor to *Clim'ability* researched the critical areas of the Upper Rhine (Insa Strasbourg, Amup, UR 7309) under the coordination of Florence Rudolf. From north to south, from the Pfälzerwald biosphere reserve to the Parc Natural Régional des Vosges and the foothills

and the ports of the Rhine, researchers worked on the effort, or lack of effort/desperation of actors to cope with their environment.

<sup>62</sup> Zygmunt Baumann (2013): *Daten, Drohnen, Disziplin*  
<sup>63</sup> This power is intended to generate, allow the growth of, and order forces, instead of limiting, warping or destroying them... in order to use people as production machines to produce wealth, goods and other people: Michel Foucault: *Die Maschen der Macht*. (1981/1985) In: Daniel Defert, Francois Ewald (Hrsg.): *Analytik der Macht*. Verlag Suhrkamp, Frankfurt a. M. 2005, P. 230 ff.

<sup>64</sup> A normalisation society is the historic effect experienced by power technology directed towards life. Michel Foucault: *Der Wille zum Wissen. Sexualität und Wahrheit* 1. 1. Ed. Suhrkamp Verlag, Frankfurt am Main 1977, P. 162

<sup>65</sup> Foucault: *Der Wille zum Wissen. Sexualität und Wahrheit* 1. 1. Ed. Suhrkamp Verlag, Frankfurt am Main 1977, p. 170

meteorology is confronting the challenge with concepts like big data and artificial intelligence. However, the complex, the varied, the mixed and the uncontrollable are beyond any reliable degree of measurement. The ethnologist Claude-Lévy Strauss recommends *wild thinking*<sup>66</sup> as the solution, which is not far from the notion of cybernetics, but in line with the concept of *bricolage*<sup>67</sup> requires continuous reappraisal. The *rational-planner* engineer is forced to improvise, to develop solutions out already known materials. They must cobble together new elements that fit in *somehow* with the overall picture.

Our project reflects these ethical questions surrounding the new garden in the context of *artistic research*. The model of the Baroque garden and the jungle find expression in equal measure as working metaphors in JARDIN GLOCAL<sup>68</sup>. We observe environmental meteorologists at work, the application of sensors, the processing of data and the creation of prognoses. We are interested in what makes each workplace special, and work with adaption and subversion of sensor data from each front yard and workplace. We contribute to the improvement of atmospheric conditions in the workplace microclimate beyond measured values and industrial use. We observe body climates and bio-political control<sup>69</sup> in the form ethnographic profiles. We understand each individual workplace as a garden of bio-psychosocial and economic ancestors. The wild in and around us should not be tamed, supplanted, cleared or made useful. To be clear, this is about making more space for *wild growth*.

## 6. Media-Ethnographic Approach

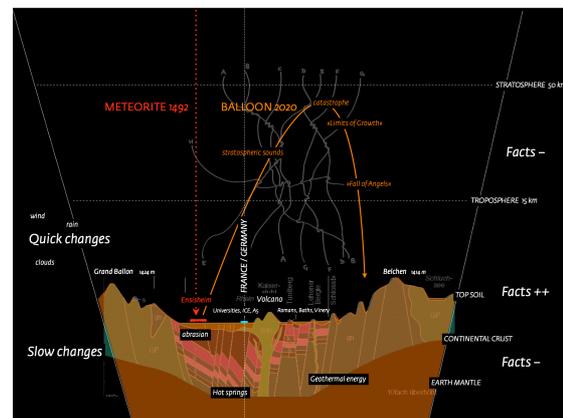
*The orchid deterritorialises itself by forming a picture that is the image of a wasp; but the wasp reterritorialises itself on this picture. The wasp, on the other hand, reterritorialises itself by becoming itself a part of the reproductive apparatus of the orchid, because it transports its pollen. The wasp and the orchid form a rhizome and are, as such, heterogenous.*

Deleuze/Guattari, *A Thousand Plateaus* (1992)

Modern evolutionary theory is breaking away from the tree and genealogy approach. We are leaving behind the logic of the copy and reproduction. In its place are the rhizome and the symbiogenesis, in which our immune system hacks and integrates viruses. Our stem cells grow together with these in a process of co-evolution and permit us to form associations with other animals and materials. The

Deleuzian view has significant effects on the media-ethnographic dimension of gardening.

In recent years, camera drones have established a new picture aesthetic of fictional and factual storytelling. In both feature and documentary films, this manner of seeing allows a controlled and a controlling perspective, which hovers ontologically<sup>70</sup> above all else. The dispositive of the camera is nothing new<sup>71</sup>, but it stands for the reasons mentioned towards one-sidedness. Elegiacal perspectives from the air—or from the crown of the tree—suggest a sense of domination and the manageability of things that have long since escaped our control. They impart the pathos of reckless carelessness, leaving people hovering with disinterest above ground. Such picture and viewing practices, which we recognise in pictures taken in space, are often used strikingly in so-called *eco-documentaries*. They feed us with pictures of horror by distancing themselves and therefore draw us, the viewers, away from responsibility and the world around us.



Section to the JARDIN GLOCALE with meteor and balloon

Just as the Greek concept of παρά (para = alongside; near to, against) fits with the psycho-geographical concept of situationist wandering, so moves the artistic research project JARDIN GLOCAL between academic logic and *parasitic* derive. Ethnographically speaking this is akin to *speaking nearby*<sup>72</sup>. Similar to the flight of a bumblebee queen through the spring garden on the hunt for a nesting site, whose wanderings are hardly anything like a search, but who eventually does find what she's looking for. After Henri Bergson and Jakob v. Uexküll, the wasp observations of Henri Fabre wander into the thoughts of Deleuze/Guattari with the notion of becoming an animal. Wasp and orchid become one to an extent in the moment of contact,

<sup>66</sup> [https://en.wikipedia.org/wiki/The\\_Savage\\_Mind](https://en.wikipedia.org/wiki/The_Savage_Mind)

<sup>67</sup> <https://en.wikipedia.org/wiki/Bricolage>

<sup>68</sup> <https://en.wikipedia.org/wiki/Deconstruction>

<sup>69</sup> Theoretical references are the doctors Kurt Goldstein and Viktor von Weizsäcker and the philosopher Michel Foucault: <https://en.wikipedia.org/wiki/Biopower>

<sup>70</sup> Florian Sprenger speaks of onto-ecologies: these do not stop at the description of biological facts, but raise them.

<sup>71</sup> This recalls the opening sequence of the psycho-thriller *Shining* (1979) by Stanley Kubrick, which takes places in winter and madness. Or the similarly disorientating pictures also filmed from a helicopter in *Spiral Jetty* (1969), the documentary of the eponymous Land Art Installation by Robert Smithson

<sup>72</sup> As expressed by film maker Trinh Thi Min Ha

and therefore a united becoming, a machine: the wasp-orchid. This can be seen as a specific form of parasitism.

JARDIN GLOCAL looks in this sense for media-ethnographic aisles and transversals, which is to say suitable touchpoints between the local and the global in order to reterritorialise<sup>73</sup> the garden. Alongside the wasp flight, it assumes the media-ecology setting of *La région centrale* from the 1970 avant-garde film-maker Michael Snow. As an experimental artist, he adapted a radar machine from the Cold War, designed originally to monitor the border between Russia and Canada, with a 16 mm camera. He used this device as part of a *Camera Activating Machine* (CAM). Snow's aim with this intervention in the neurosis of the Cold War was to protect the wild:

*The camera is an instrument that has expressive possibilities in itself. The film will become a kind of absolute record of a piece of wilderness. Eventually the effect of the mechanized movement will be what I imagine the first rigorous filming of the moon surface. But this will feel like a record of the last wilderness on earth, a film to be taken into outer space as a souvenir of what nature once was. I want to convey a feeling of absolute aloneness, a kind of Goodbye to Earth which I believe we are living through. In complete opposition to what most films convey, this film will not present only human drama but mechanical and natural drama as well. It will pre-serve what will increasingly become an extreme rarity: wilderness. Perhaps aloneness will also become a rarity.*

<sup>73</sup> <https://en.wikipedia.org/wiki/Deterritorialization>

<sup>74</sup> Viktor v. Weizsäcker is, in comparison to Deleuze/Guattari, even more for harmony. Nevertheless he emphasises the meaning of unforeseen changes of cognition and embodiment for new forms of perception and behaviour: "The Gestalt circle is not a depiction of the living figure of the movement of life, but simply an instruction to experience the living. You can imagine yourself as a passenger on the path of this circle... To get back to the starting point i.e. turn back yourself, you must turn back at least once, either suddenly or gradually. That means you have to turn yourself around yourself. This also forces the direction of view to change, so that the previously visible is now the invisible (and vice versa)... This means we experience something about the cause of unrest, which is obviously the contradictory nature of our existence. The cause for both – the contradiction and the unrest – is the mutual secrecy of our existence in the Gestalt circle. I illustrate this as the revolving door principle. It's not possible to own the Gestalt circle in its integration (neither thinking nor perceiving), but we must pass through it to

## 7. Media Ecological System

*Nature does not know extinction. All it knows is transformation.*

Wernher von Braun, Inventor and Space Expert

JARDIN GLOCAL shares the stance of *La région centrale*. We experiment with a stratospheric balloon and a drone that, guided by climate data from the Upper Rhine, lay unusual trails of footage – similar to the exploratory movement of a wasp through a field.

When compared with the oceans, landmasses and rivers, the atmosphere is the least stable and fastest climatic variable. A weather balloon is fitted with a 360° camera, microphones and sensors. It is launched from a field near Ensisheim in Alsace at the very point where a meteorite landed from the sky as portrayed by Albrecht Dürer in his copper engraving *Melancholia*. The high-tech device climbs slowly, passes through the upper part of the critical zone, and passes diagonally through the Upper Rhine Valley towards the west. At an altitude of 30 km, there is a catastrophe. The balloon bursts, the helium leaks out and the apparatus falls to the ground with a parachute. The landing site is located with a tracking device and mapped accordingly. The flight and its recorded data, along with the start and end point of the trajectory, are processed in the form of an audiovisual performance.

The flying contraption sways in unpredictable directions and lands suddenly in a range of decisive (critical) moments and logics according to permanent deterritorialisation and reterritorialisation<sup>74</sup>. Drone, balloon, wasp and our thinking transcend territory ever differently and reveal diverse forms of embodiment, Earth and home. They pursue research through participation<sup>75</sup> and carry at the same time their experimental systems<sup>76</sup> within. A selection of five of the 120 environmental sensors in the Upper

suffer its contradictions in an on-going process of losing sight in order to gain something new." GK, GS4, 19f.

<sup>75</sup> Victor v. Weizsäcker speaks in this context of the representative principle i.e. the revolving door between perceiving and doing, which represent each other, break each other, and bring the other into being. Different perceptions produce differences in action, and different action produces different perceptions. Biology shows that the living finds itself in a mode whose rationale cannot be objectified." This is what Weizsäcker calls the basic relationship, meaning that, "in order to research life, we must be part of it." V.v. Weizsäcker, *Gestaltkreis*, 1973, <https://books.google.de/books?id=8VYw6PrJBI0C&pg=PA265&dq=Dreht%C3%BCrprinzip+Gestaltkreis&hl=de&sa=X&ved=0ahUKEwiWkrithZ3oA-hUOMewKHTaYAlAQ6AEIOjAC#v=onepage&q=Dreht%C3%BCrprinzip%20Gestaltkreis&f=false>

<sup>76</sup> Experimental system is a concept advanced by the historian Hans-Jörg Rheinberger, and we refer to it often in our work. Experimental systems are pivotal moments of development in modern natural sciences.

Rhine<sup>77</sup> manipulate the function of the contraption by exerting control, or *feeding information*, in unfamiliar places. Transcodings of environmental data into navigational data modify the pictures and cause these proverbially to falter. The Baroque garden and its control dispositive experience a wobble.

Our project is, in terms of sensory ethnography<sup>78</sup>, on the hunt for a degree of *participation* revealing new types of pictures of our gardens and their complex structures. We produce impressions that question human perspectives<sup>79</sup>. Visually speaking, JARDIN GLOCAL is looking for a spatiotemporal emancipation of the differentiation between inside and outside. Away from cartography towards framing and a cartogenesis of the *critical zone*. JARDIN GLOCAL is in this sense a parcel with a volatile, semipermeable membrane, which puts into question our own understanding of media representations.

The media-ecology exploratory movement JARDIN GLOCAL finds expression as an audio-visual concert in the form of an experimental system. Five selected work places from the *MoBiMet System* described above are documented media-ethnographically with a drone<sup>80</sup> and other devices, and represented artistically in a room installation. The climate data conveyed from five places influence the behaviour of a cluster simulation, and therefore the experimental system. Through the interplay of individual *agents*, emergent figures and forms appear which serve to visualise and sonify the respective locations.

The positioning of the stations takes account of the geographical position of the respective measuring

points. In nearness and unity, the microclimate and its variance can be experienced both visually and acoustically. Each swarm is a musical voice in the form of a *spring-mass damper system*<sup>81</sup> assigned to a loudspeaker. The overall visual structure of the individual swarms is visible in each case on a screen<sup>82</sup>. The resulting film material appears on a canvas and is transmitted into the room<sup>83</sup>. It uses the pictures resulting from the oscillating visual guidance and irrational flight route, which are in turn the result of technical measurements<sup>84</sup>.

<sup>77</sup> In cooperation with Andreas Christen, leading professor of meteorology at the University of Freiburg <http://www.meteo.uni-freiburg.de/>

<sup>78</sup> See the Sensory Ethnography Lab at Harvard University <https://sel.fas.harvard.edu/> where a pictorial language is being developed which reports directly and seems almost powerless compared to camera movements of drone flights. The best-known example is the film *Leviathan* by Lucien Castaing-Taylor and Véréna Paravel (2012)

<sup>79</sup> See "Wild topologies in 360°: a fly on the inside of a sphere" (Fetzner 2019) <https://zenodo.org/record/1120448#.Wj010ISFiRvora>

<sup>80</sup> Flight coordinates result from the calculated mean of all individual positions of the agents of several swarm algorithms, which are formed as a function of the sensor data present.

<sup>81</sup> *Signale, Systeme und Klangsynthese: Grundlagen der Computermusik* von Martin Neukom, Verlag: Peter Lang, 2005

<sup>82</sup> The swarm algorithms are based on the model by Craig Reynolds. Using a simple set of rules, in which the individual agents in their immediate vicinity move towards the centre (cohesion), roughly in the same direction as their neighbours (alignment) and at a small distance from one another (separation). With active tracking, it is possible to create predefined shapes and patterns with the agents. The spring-mass-damper system for controlling the sound synthesis follows that described by Joseph M. Co-majuncosa in "Physical models of strings and plates using a simplified mass-string method" (<http://www.csounds.com/jmc/>). Depending on the configuration of the two models and the properties of the

excitation signal, the duration, amplitude, pitch and the spectrum of the synthetic sounds vary. Both systems are linked together. The individual agents of the swarms stimulate the physical model of the tensioned string depending on their position, density and speed of movement. In this way, two complex systems are interconnected, which on the one hand have a high degree of self-dynamics, and on the other are easy to control. In addition, the slowly changing sensor data can be designed to be visually and acoustically stimulating using such simulations.

<sup>83</sup> The video recording made in the form of a spherical panorama is displayed distorted by stereographically projecting the image plane onto a spherical surface. A three-dimensional oscillating polar shape, formed from the amplitude and frequency of the string simulations, determines the perspective distortion of the synthetic image based on the current polar coordinate.

<sup>84</sup> An electronic musician interacts with the swarms by controlling their behaviour and the physical aspects of the string model. The swarm, freed from external influences, leads to unstable, self-sufficient and chaotic behaviour. In this situation, the two models are barely controllable and can therefore be viewed as autonomous and self-improving units. More mixed sensor signals and high damping values weaken the autonomy of the two simulations. They require a higher energy input from outside. The projection of the recorded drone flight serves as an improvisational basis. The perspective follows the vibrations of the acoustic model, which allow the individual actors -the space, the technology, the signals, the air currents, and the spectators - to relate to each other, in the synthetic garden.



DEGLOBALIZE (2019): *Garden on Nile island*

## 8. Epilogue

A garden is an enclosed topos. It can be described as an on-going interfolding which, just like the gastrulation of embryonic cell tissue, works continuously to separate an inside from an outside. Each of these segmentations unfolds new leaves, cleavages, inversions and environmental reversals through which sub-cells and sub-milieus form as relational networks<sup>85</sup>.

In the age of digitalised sense, bio-technological control instruments are the driving force for symbolic folding processes. *Intelligent systems* take over the control of topological deformations based on growth and exploitation and which correspondingly proliferate<sup>86</sup>. At the same time, they over-

<sup>85</sup> Intelligently networked cyber-physical systems form a new order of bits and bytes in a virtual garden, which decisively penetrates local and global life outside this space and also raises the question of a new understanding of human-nature technology. Technophysical growth is exponential, as is the spread of viruses.

<sup>86</sup> Growth as an end in itself has led to many excesses. Their finiteness was already pointed out in the Club of Rome's models in the early 1970s. The environmental researcher Johan Rockström, who focuses on the biogeochemical cycles of the Earth system, the global garden, argues similarly. Exceeding load limits overwhelms self-regulation.

<sup>87</sup> The myth of modernity is based on the absolutisation of the global, while homeland is always location-specific and local. Global is also not one world, but different competing worlds that are in an economic competition or exploitation relationship with each other. Hence the talk of the so-called first, second and third world. Globalisation is equated with progress, locality with backwardness. Globalisation means: overcome your affiliation through

stretch human capacity for thought and the ability to act and take responsibility.

JARDIN GLOCAL researches the *critical zone* of the Upper Rhine. In the form of Agential Cuts, we observe the new ordering of the complex mesh of living beings, territories and forms of production in times of radical upheaval. The vulnerability of modernity<sup>87</sup> and its globalised metabolism has become glaringly obvious through the Corona pandemic<sup>88</sup>. Considering the cyclical game of mortality and decomposition, the opposition of culture and nature is becoming increasingly called into question<sup>89</sup>.

Along with Bruno Latour, JARDIN GLOCAL is calling for a restart for modernity, into whose *programme of great divisions*<sup>90</sup> grave problems have crept over the course of the centuries. Like Michel Serres we see the solution in a *nature contract* that renegotiates the relationship between people and their

flexibility, through the destruction of territories: overcome yourself, your being human.

<sup>88</sup> The Corona Pandemic 2020 is also a result of ecological change. Due to the destruction of bat habitats by monoculture palm-oil plantations, the animals have moved into human settlements.

<sup>89</sup> In the context of the current Corona crisis, the problems of hyper-efficient global society and how closely local and global vulnerabilities are linked biologically, geographically and socially are very clear: from bottlenecks in the supply of medicines to an emerging economic and financial crisis. If computer viruses or climatic extreme weather events were added to the biological virus, there would be a risk of a global collapse with unforeseeable consequences.

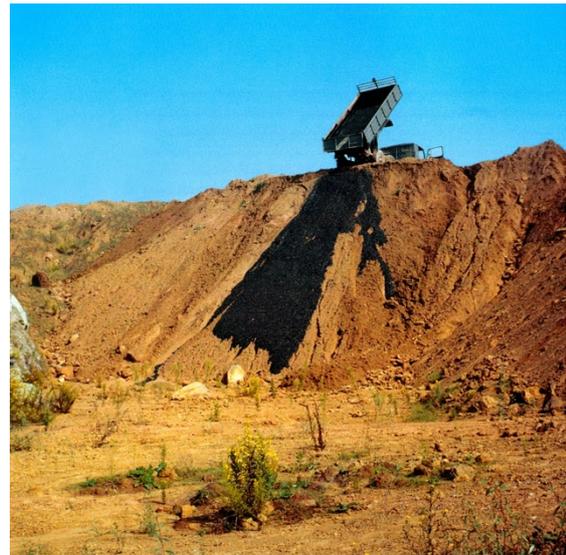
<sup>90</sup> Modernity has been based on the idea of separations since the 17th century. Politics of science, nature of culture, art and science, laboratory and field. These separations are arbitrary and artificial, so we have never been modern as envisaged by Latour.

*environment*. Global and local responsibility must strike a new balance, without ridding the garden of its spirit. JARDIN GLOCAL sees itself as a contribution to the search for a connection with the Earth with consideration of the *power of feelings*. Not to solve the problems of the *terrestrial*, but more to make a virtue of their insolubility<sup>91</sup>. We won't discount animalistic or voodoo practices<sup>92</sup> either.

The concepts of resilience, vulnerability and care expose in this search an ambiguity and ambivalence that is probably never traceable. If they are too much economised, their success will become demandable, easy to plan and to produce. People and societies would then connect them too closely with biopolitical and economic norm-forming and normalisation processes. The concepts would then just become mere symbols. Economisation, success orientation and symbolic formality exclude differences, openness, ambiguity, resistance and wild growth. These processes bind our gardens on the contrary to the powerful actors of economy and state and their discourses. Vulnerability and the *different* in the sense of the philosopher Jean-Francois Lyotard should always be excluded from such logic, instead of being endured and traded off with each other. Life and liveliness always mean wounding, mutual exposition and precarious mixes of penetration and separation with the natural and its radical nature in and of itself.

With the political transparency currently demanded of all *individual environments* on the symbolic level, all darkness should be extinguished. Phenomena like the climate catastrophe show that nature's independence does not fly in this environment. What we are currently experiencing in the Corona pandemic is what Jacques Derrida describes with concepts like haunting, pursuit, and the ghostly-spectral. Only at the level of this legacy does modern gardening make sense. At this level we are not only dependent on the whims of nature, earth, wind and weather, and magical forms of a constantly precarious relationship with the forces of nature, but also radically exposed to these factors. We see in this naturalness, in this blend of wounding and constantly (im)possible success and the need time and again to bear being exposed to each other and the other, and to negotiate this relationship, the final referents. For Baudrillard these must be excluded and suppressed through the simulacrum of symbolic explosion and irrepressible socialisation.

We need more urgently than ever a parliament of these things, both our own and those of naturalness and natural growth – for the sake of their and our borders and wounds. A parliament of referents, not just symbols. These abysses are at the heart of the artistic research project JARDIN GLOCAL.



Robert Smithson (1969): *Asphalt Rundown*

## LE JARDIN GLOCAL

Artistic Direction: Daniel Fetzner

Documentation: Benjamin Schnitzer  
Sound and Coding: Ephraim Wegner  
Concept and Artistic Research:  
Daniel Fetzner und Martin Dornberg  
Scientific support:  
Andreas Christen, Rüdiger Glaser  
und Florence Rudolf

Authors:  
Prof. Daniel Fetzner, Dr. Martin Dornberg,  
Prof. Dr. Rüdiger Glaser, Prof. Dr. Andreas Christen,  
Prof. Dr. Florence Rudolf, Eva Treiber, Benjamin Schnitzer and Ephraim Wegner

*A collaboration between the Laboratory for Media-Ecology at the University of Offenburg and the Centre for Psychosomatics and Psychotherapy at St. Josef's Hospital in Freiburg, the Institute for Geo- and Environmental Sciences, the Chair of Physical Geography at the University of Freiburg, and the INSA in Strasbourg.*

<http://mediaecology.de>

<sup>91</sup> Two book titles by Alexander Kluge

<sup>92</sup> <http://deglocalize.com/#NILEVODOO>