





A chaotic analysis

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We circle and are circling
in this planet of cloud
on the other side of this too small

- Peter Dale Scott -Coming to Jakarta: a poem about terrror

content

chainpointofviewtimesystemsfeelingspop-up

Instructions for the reader

There will be a jump between a variety of subjects, there will be different writing styles. The topic is subjective and chaotic itself which makes this a chaotic analysis. It doesn't give the opportunity for great order. Because of this, the writer has unfortunately not the possibility to be of great assistance to the reader. Ahead of you lies a small jungle of words and thoughts, questions and options. The only help I can offer you, are three different colours.

My apologies.

Chaos and order. Like night and day. They belong together. One is not there without the other. Both are necessary. Both need to be. They are a chain that interlocks. While order lets us breath, think and hear, chaos shakes up given structures and situations; it can be a chance and it can be a catastrophe. They tell different stories, have different timelines. While chaos appears and breaks out, sudden and abrupt (although it might have built up itself hidden and over a longer period of time), order takes it's time. Chaos is fast. Chaos is the speedboat. Order the tortoise. Chaos has only one visible amplitude on the timeline. Order happens to have many.





chain

As part of the UNESCO 'Memory of the World' programme, countries can ask to register certain books and artefacts they find important and of high value for their history. UNESCO also created a section about lost memory. The lost memory of the world. It contains libraries and archives that were destroyed worldwide in the 20th century. The reasons for the destruction and damage can be fragmented in: natural causes (fires, flooding etc.), entropy or inherent instability (bacteria, insects, mould etc. but also bad storage, bad restoration etc.) and armed conflict (removed by occupying forces, terrorism etc.). UNESCO made a list of how and which of the archives and libraries got destroyed.

"In the sense of the ancient notion of katechon (defferal) the archive suspends the merciless thermodynamic law of physics that all things tend to dissolve into disorder until death occurs."

The UNESCO list is one step further. A form of order (archive or library) becomes chaos (disaster in whatsoever form) and becomes order (list) again. A chain reaction between paper and impact. A wild circle.

¹ Wolfgang Ernst, *The Archive as a Metaphore*, Open! Key Texts 2004-2012, SKOR nai010 publishers

point of view

If you find earth boring, just the same old, same thing, come on sign up for Outer Spaceways Incorporated

-Sun Ra-

Chaos and kosmos

The opposite of the Greek word chaos is kosmos. Order. World order.

Looking at the stars at night everything seems to be completely chaotic at first sight. Bigger stars, smaller ones, closer ones. Ones that are further away. More shiny, less shiny. Shooting stars, satellites. Endlessness for the eye. Space that is impossible to overview. Eternity. So far the romantic part.

The kosmos is build up upon gravity. It's impossible to destroy this order, to make it fail. It's precise for about 13,82 billion years. It consists planets and stars including moons, suns. white dwarfs and red giants. Sun systems, galaxies. Asteroids. Black holes. Nebulas. All over the universe the same materials, chemical reactions, laws of science can appear. Everything is made out of atoms. Matter and anti-matter. Everything our planet consists of is possibly a result of the Big Bang.

The universe is expanding. And because of that our galaxy, the Milky Way, is heading towards the Andromeda Galaxy with the crazy speed of 400,000 km/h an hour (which means that even if I lay motionless in bed or even if I am dead I am still really fast). Scientists calculated that one day (in about 4 billion years) these two galaxies will collide. Two galaxies will slowly become one and find their way of gravitation around each other.

There are some theories about how the universe will come to an end.

One of them is the Big Chill. In this theory the universe will finally become the victim of entropy. The expanding universe, expanded so much that it will make gravitation impossible. The temperature will drop to absolute zero and the universe will simply stop. All the energy from the Big Bang that drives the cosmos will have spread out too much.

...Is chaos possible without order?

If there is disorder, there must have been order at some point. That is what we think. The distinction between chaos (or in case of the universe and to stay in scientific terms: disorder) and order is our interpretation of what there was, is, will be. Theories are theories, not facts. They can become facts or hoax. The matter will stay what it is. We try to interpret and order it, so we can understand. We can only look into the universe from our point of view. And even our point of view is divided into many.

Chaos in the macro, order in the micro

Music can be seen as a form of order. The keys give structure, set the tone. They are the folder that the notes are put into. The bar lines build the chapters.

Looking into Jazz, chaos and order construct a chain again. The theme builds up an order that gets destroyed by the improvisation. The theme is melody and relaxation, the improvisation is adventure and tension. Chaos as an excitement. As the trip into the jungle. Order as the warm fireplace to cuddle at.

The fireplace: "Rhythm in music is directly related to biology. The beating of our hearts and the intervals of our breathing are the foundations from which we developed dance and music. The heartbeat, this "pulse rhythm, is moving at a given tempo or speed, is the basic approach to jazz rhythm." 1-2-3-4, 1-2-3-4.

Jazz lives in the collaboration between the participants of the piece they are playing. "Musi-

cians speak of swinging. This is a term that is impossible to define precisely. But when all the rhythms interlock smoothly, something magical takes place and everyone in the vicinity (musicians, dancers, listeners) feel it.³ A felt order in the swing.

As the improvisation arises out of the theme and composition, how much of a theme is needed to build up an improvisation out of it?

...How much order is needed to be able to form chaos?

In traditional jazz the improvisation part is also following rules. Rules as: taking a pre-existing melody and varying it, taking an original melody and varying it, doing an harmonic improvisation with consonant chord tones or a modal improvisation using the dorian scale. The jungle is not a jungle yet, more a gigantic greenhouse with different sections.

But with free-jazz things change. People like Charles Mingus or Sun Ra broke down the conventions and the rules, the rhythms, the use of instruments and went loose. Listening to *Tijuana Moods* from Charles Mingus, the rhythm is often way faster, breaks loose, castanets are used, voices speak. It is a driven, crazy ride. It is playful and it feels like something just waited to break out, to leave structures behind. Something was enough and a change needed to be done. Chaos that almost became a necessity.

A chaos that asks a lot from players and listeners, because it is new and unknown but it opens up new doors and possibilities.

...Chaos as a desire, not a fear...

The same experimental approach can be found in Avant-garde music. It seems to be total chaos and anarchy while listening to it. It squeezes your ears and brain, goes up and down, left and right, screams at you. Freaks out and pauses, always unexpectedly.

But different from free jazz, it doesn't let loose in the same way. It is constructed chaos. In fact, it is complete order. It is composed, not improvised. But it is often composed in a more unusual way.

The avant-garde composer and musician John Zorn for example made an album called *Spillane*. It is fully composed via a file-card system. He wrote different instructions onto the file-cards and held them into the air at certain points during the recording. The musicians had to follow these instructions precisely. Although some of the instructions said something like: pair together in two and play together as long as you feel like it, it is still composed and arranged.

John Cage on the other hand didn't experiment with the way he used musicians in his compositions, but more with the instruments. He made several compositions for a prepared piano. The prepared piano was a technique that he invented. Which partly changed the piano into a percussion instrument.

The way he came to the idea and constructed his first piece in that way had again chaotic parts: For a whole day he tried to find an African twelve-tone-row. He decided that what was wrong was not him but the piano and that he had to change it. After thinking about other composer's techniques that he liked, he went to the kitchen and got a pie plate.⁴

...But then: is a free way of thinking something chaotic? Can freedom become chaotic?

The musical scores include instructions where all the objects have to be put and how. "In his earliest pieces, he gave only the most general ⁴ http://johncage.org/prepared_piano_essay.html, How the Piano Came to be Prepared

indications of what kind of object to use; in later scores, he became increasingly precise, giving the size of screws and bolts. At the same time, he began specifying the precise position of the preparation on the string, giving measurements from the piano dampers accurate down to a sixteenth of an inch. This precision, he soon found out, was misleading, since different pianos were constructed slightly differently; the same object at the same location on the same string of two different pianos could produce two different sounds. In the table of the preparations for *The Perilion Night*, he took this into consideration, and indicated which specific Steinway models the measurements are applicable. In *Amores* he approached the problem from a different direction,

describing the desired results (e.g. the screw must be large and between the strings as to produce a resonant sound, rich in harmonies) but leaving the precise sizes and locations to the performer."

James Pritchett:

The Music of John Cage, Cambridge University Press

Despite these instructions, the scores are still giving the preparer a hard time. It takes about three hours to install all the screws and rubbers correctly, to find the right sound that John Cage had indicated.

...Precision can become a tight corset; too much order can unwillingly produce chaos.

Order in the macro, chaos in the micro

Chaos can always turn up at places where one looks closer. The magnifying glass used for systems. The closer you look into a form of order the bigger is the chance to find chaos.

I am looking out of a square window on the 7th floor at the academy. It is a beautiful day. No clouds, only quite some condensation trails criss-crossing the sky that give a hint of the nearby airport.

From up here, I have quite the overview. I seem to sit on top of things. On the other side of the street is a building site. They started a couple weeks ago. It will be offices with a lot of glass, says the advertising board attached to the construction fence. There is a crane doing it's work. They almost finished off the basement. All concrete. It seems to go well. Left of it is the entrance to the cemetery including a house for ceremonies. Behind these two buildings lays the cemetery. Quite a big one. Surrounded by trees that stand in a row with perfectly trimmed hedges. Rows of graves. Different sections divided by more hedges. Behind that is a road with a crossing on the right side of my picture frame. Next to the crossing, on a bridge can be found a metro station, which is located right between the two sides of the highway. The road, the highway and the metro are crossing horizontally from one side to the other of my picture frame. Behind all the traffic, lays the hospital, including the cancer centre. It is a beautiful day.

Everything seems to run smoothly. The workers work, there is a funeral ceremony at the cemetery taking place, no traffic jam. People come to or leave the metro station. All working.

Maybe the architect of the new building made a miscalculation which will cost a lot of money; maybe after the funeral a family éclat will take place because someone said the wrong thing at the wrong time; maybe two lovers waiting at the metro station just broke up; maybe someone in one of all the cars passing just took the wrong lane and decided to run off now not to come back; maybe someone who got delivered to the hospital after a car accident will die in five seconds while someone else at the cancer centre just found out that he will survive. Maybe, maybe, maybe, I shall never know. It is a beautiful day.

... What contains more beauty: chaos or order?

Someone's order is another one's chaos

I could talk about ants now but instead I will talk about Hilde.

Portrait I: The Hilde-System

Prologue

I am at Marille's house. She shows me a lot of photos while I help her cleaning her drawers. Marille is 87. She shows me a vacation photo. A picture of Hilde. On a road trip. Maybe in the '70ties. Hilde leaning against a maple tree. Smiling.

Something strikes me: "why is she wearing two different shoes?", I ask. Her left shoe is white and her right shoe is blue and slightly bigger. Marille looks surprised, thinks and grins: "because she found the white shoe pretty and the blue one more comfortable."

Hilde's house was a universe. A whole system. The Hilde-system.

Her house contained furniture as every other house. But every room was also filled with things from top to bottom. A lot of these things

where just there for decades. Also from times when her parents where still alive. But a lot of other things were sort of in use. They had a purpose. They were there for the purpose of her rituals.

The kitchen

A small square room. A window facing southeast. A sink, a working table, a stove, a table by the window to sit at. Two chairs. A lot of stuff everywhere. Most things happened there.

Specialities: a washing line above the sink. On the washing line a bunch of plastic bags hanging in a row. The freezer bags needed to be washed after being used, so they could then be reused. They were used for a lot of things. Covering meals she hardly touched and storage for cakes she never ate up. Food for weeks was already prepared (squashed meat in small portions, put into freezer bags in the freezer). One freezer bag also contained a box with her pills for the day. She really liked pills.

Hilde ate like a little bird. All the food had to be turned into some sort of puree as she did not like to put in her new teeth.

She only used one specific cup. I can't remember what it looked like. But I do remember that it always had to be placed with the handle bar pointing in her direction, so she could lift it up easily without having to move the cup. She was kind of lazy.

In the kitchen cupboard in the top drawer was a lot of cardboard. It was cut into the same size and from empty rice or boxes. They were to be used as note sheets.

Hilde was wearing slippers that were actually way to big for her. But she liked to be comfortable. To make it possible for her to wear them, she had to pack in fresh napkins every so often as an inlay.

There was also a small old TV in the kitchen. Before I was leaving, I had to read out the programme of the day to her. She liked wildlife documentaries, zoo reality soaps and one particular quiz. Sometimes something with music (she had a good knowledge on classical music). She disliked films or series where people kissed.

In the kitchen she normally said the following sentences to me:

"Fräulein Andrea, mein Tee ist zu kalt"; "Fräulein Andrea, mein Tee ist zu heiss"; "Was haben wir denn heute für ein Programm?"; "Fräulein Andrea, gehen Sie jetzt schon?"

The living room

In the living room was some sort of chaise lounge, a small table and a desk next to it, a big cabinet with a huge flat-screen TV. There was also a bench with a lot of animal lover magazines on it. Little porcelain figures and other bibelot where spread all over the room, mainly cats.

The chaise lounge also functioned as her bed. She did not bother anymore to go to bed. She did not even get undressed anymore. She did not sleep in a duvet anymore but with woollen blankets. I always had to prepare the chaise lounge for her, close the curtains and turn on the lights.

The porcelain figures had to stand in a certain order and direction that nobody understood besides her. The magazines piling up on several piles on the bench were old. From years ago. The ones with the cover she liked the most had to be on top of the piles. She never read these magazines. They were just there.

Sentences said inside this room:

"Fräulein Andrea, schliessen Sie bitte die Vorhänge."; "Fräulein Andrea, machen Sie bitte das Licht an."; "Fräulein Andrea, schalten Sie bitte den Fernseher ein."

The toilet

When Hilde sat on the toilet, she never bothered to close the door. It was her house. When she had guests, they had to live with that fact. Her kidneys weren't working properly anymore, so she went to the toilet very often. In the toilet where two different kinds of toilet paper. A lot of it. Piles of it. Same brand but two different colours. Blue and yellow. Every time she sat there, she used both. Eight sheets of the yellow one and five sheets of the blue one. According to her, the yellow one was softer.

The bathroom

A sink, a bathtub, a chair, lots of boxes, small cupboards and shelves filled with old pill boxes. An old radio.

In the bathroom she normally sat on the chair, listened to classical music on the radio, while I was trying to put new underwear on her. The many old pills filling up the space should have been thrown away. It was a *mission impossible*. It could only be done, in a way she didn't notice. There were even pills from the time when her parents were still alive. We are talking of the 60ties. Hilde loved her pills. She really did.

Sentences said in this room:

"Fräulein Andrea, machen Sie bitte das Radio an."; "Fräulein Andrea, das Radio ist zu laut."; "Fräulein Andrea, das Radio ist zu leise"; "Au"; "Fräulein Andrea, machen Sie bitte das Radio aus."

The catroom

Clothes, a wardrobe, boxes, a cupboard.

A room mostly without Hilde but often with her cat. A spare room, containing lots of things out of use. It officially turned into the cat's room. The cat loved to hide in there, hang out there, if everything was too much. Too much attention, too much fuss. The cat could be quite aggressive. I forgot her name. We were not really friends with each other.

The bedroom

A bed, a wardrobe, a drawer.

The bedroom was an abandoned place. It was not in use anymore. It only told the story of a past. It told the story of a woman that used to like fashion, with a wardrobe full of clothes, she did not wear anymore, with a lot of necklaces, bracelets and rings hanging on the wall and laying around. Costume jewellery from different countries and decades. It used to be the room of a traveller. Now it was only a space. Without rituals, without words. A room filled with things and emptiness.

time

Expanded and condensed

The German author Arno Schmidt collected some notes in a box for ten years. Many notes in fact. 120,000 of them. It took him four years to put these notes together and to turn them into a novel. 1,334 A3 pages. *Zettel's Traum*. Notes that became an A3 rock. The story is about a visit which takes place over a timespan of twenty-five hours. Twenty-five hours put together in fourteen years.

Time plays an important role when it comes to order. Order needs to be discovered, thought through, build up upon. Systems need to be developed. And only time and experience can help make it perfect.

Someone's order is another one's chaos II

I always assumed that the Nazi's created the idea and the systematisation of the concentration camps somewhere at a desk. Reading Stanislav Zámečnik's "Das war Dachau" I have learned differently:

the buildings of the camp in Dachau used to be a factory for bullets during the First World War and were out of use when the Bavarian Nazi politics decided to move people from the overcrowded prisons in Munich to Dachau. A week later Himmler gave a press conference, in which he announced that they have opened a concentration camp as it would be impossible to let these people overcrowd the prisons and it would also be impossible to let them walk around freely, as they would only continue to tell lies.

The first prisoners at Dachau were social democrats, communists and monarchists. Dachau wasn't the first camp and at the time they were built up everywhere in Germany really quickly. As soon as Himmler became commander in chief of the Bavarian police, the SS took over the camp and the times for the prisoners became rough. First they had to

build a prison, *the Buncker*. Other buildings followed. Torture happened arbitrarily but became a gruesome daily routine in many varieties. They also found varieties to hide the murders. Officially those murders were declared as suicides or attempts of breakouts. The first Jewish prisoners got killed. Judges who tried to find out about the strange things happening, got stopped by orders. Theodor Eicke, a fanatic Nazi, became commander of the camp. Just being released from a psychiatric clinic, he organised the camp in a structure that later all the camps used. This is only how it got started in 1933... Step by step, the rules of the camp followed the needs of the system. By 1939 the system was per-fected. Torture and murder in perfection.

Material

Time is material. Says a voice in a video of Mario Garcia Torres. Time is material. Looking into the universe again, it is utterly true. Since the universe exists, time exists. And all the stuff within it. Out of these materials, out of this matter, we are made and everything around us is. Time is material. "If every thing has its own place and point of time and its limit of time, there will never be two of the same things. The temporarility of places and their variety is manifested in the space and the temporarility of points of time is manifested in time. That basic character of the thing [...] is established in the essence of space and time."6Time is material. Our past, present and future is full of material. Even our memories involve material. "Things are not affected by the time itself." They are affected by us and we are ⁶ Martin Heidegger, *Die* Frage nach dem Ding, Max affected by them. Niemeyer Verlag Tübingen

Memory

It's Christmas time. I am back home at my mom's place. The Christmas tree needs to be decorated. I get out the box with the decorations. The box is the same cardboard box from more then 30 years ago. My mom is a master in packaging and the box is thoroughly wrapped in adhesive tape. It takes me quite a while to get it all of. While doing that, I rediscover the box. Inscriptions from different decades tell me about the

7 Ibid.

content. Different decades of tape, that took off bits and pieces of the cardboard. Different decades of pen. But the same old box. Over these decades the content of the box has changed. At first there were only 70t's decorations bought by my Mom. Then my Grandfather came to live with us. With him came his Christmas decorations from the early 30's and before. My Granddad died, his decorations stayed inside our box. Glass balls broke, new ones were bought, one of the three Magi from the nativity set got eaten up by a dog. Other things came as a present or were made by hand, others disappeared. Christmas decorations can carry a lot of memories, they can act as a seismograph of our lives. But the decorations changed and the box stayed. The memories inside the box changed. The box didn't. The box became the memory. The order became the memory. This simple cardboard box knows it all.

Pile I

Time might be material and material makes chaos visible. The outbreak of chaos happens fast and at an unexpected moment.

A house that got destroyed by a tornado or a fire could be claimed as the ultimate chaos. It is the result of an impact. An impact manifests chaos. The broken materials and leftovers of the house are the chaos in itself and also create chaos for the people who lived there.

After my family's company building burnt down, I went home to help them. Everyone there was just lost. Everyone was in shock. Everything was covered in black. Everything was covered in the smell of cold smoke. I had only one goal. To get rid of the one big black leftover-chaos-stack in front of the building. It was huge. It took me almost two weeks to clear it up. I looked like a chimneysweeper every day. But the more active I was, the more active became the people around me again. The day it was gone, I felt happiness and deep satisfaction and everyone around me had at least hope again. I was the Maria Kondo of the fire department. I got rid of all the things that didn't feel right.

Pile II

A house gives us shelter. It is our safety. The things we surround ourselves with give us comfort. But: too many things, less overview. More possible chaos.

If we are involved in too much inner chaos, material can become the illustration of that. If one feels very depressed, one is more likely to care about tidying up the space that surrounds us. The room, the kitchen, the toilet...

Piled up material is able to give us the strange sensation of inner peace. The re-ordering of the overfilled closet with all the jumpers in a neat row, the piled up washed and shiny dishes, organised kitchen cupboards. Breathe.

...Can chaos become visible without material?

systems

Numbers

"... More then 3,500 witnesses got heard. The charge contained 556 pages. The files comprised 76 volumes with more then 37,000 pages. Accrue 623 special volumes, piece of evidence files and data carrier with a capacity of 804 terabyte or so, together with 963 hours of video material." These are the numbers of the trial that is held over the mass panic that broke out at the last Loveparade in Duisburg in 2010.

Numbers make us believe. They clear out the jungle like nothing else. They turn assumptions into reality. For the best and the worst. At the same time they are able to hide a lot of drama behind their slender look. But also make drama occur: "21 people died. 541 got injured. Until now six survivors of the incident took their own lives."

⁸ http://reportage.wdr.de/ loveparade#11264

⁹ Ibid.

Documents

Proof

Our life begins with a document and ends with one. It begins with a birth certificate and ends with a death certificate. We have managed to live and we have managed to die. And for that matter, we earn ourselves a document. The first and the last one of many documents throughout our lives. But the two most important ones that proof our existence. Without them we are not real.

Last year my Dad died. When I came back to work, I had to send a proof to my employer, that he really died. Only then would they pay my missing time as an extra holiday. I have scanned and send in his death certificate and the bill from the cemetery. Now my Dad was really dead.

Truth

Jürgen Todenhöfer, a German ex-parliamentarian and journalist, just travelled through the so named "Kalifat", the area of the terror organisation IS, together with his son. The only thing he carried with him, to ensure their lives, was a letter from the "Kalifat" itself. With a green stamp on it. He made it through. No one questioned the letter or disbelieved the stamp. A letter can become the ultimate truth.

...Is order truth?

Certainty

A couple of weeks ago I had to undergo an operation. The hospital "chauffeur" drove me and my bed from one station to the other. From station to x-ray, from x-ray to station, from station to operating theatre. On my bed lay a blue sheet of paper. A form. For the transport. It had my name on it and some boxes that were ticked. One line said:

Reanimation: □yes □no

Paper

Without paper, there is no belief but also no distance. The secretary of SS-Obersturmbannführer Eichmann said in a documentary once: "We were not confronted with people. We've only seen paper." She lived in Berlin and went to an office every day.

Paper is white and clean. Official and without any emotion. Paper is distance. A document seals and also changes the timeline. A document turns present into past. Or it declares a future that will be turned into past on request.

Brands

Louis the 14th decided to turn the small castle of his father, which was surrounded by a swamp outside of Paris, into a big palace, which finally became the centre of his power. And he wanted the unwelcoming swamp, which was filled with mosquitos, to be transformed into a gar-

den. But not just a garden. THE garden. A clear sign of his absolutism. To show that he was king. A king who has the power to turn unusable land into pure and ordered beauty. Inspired by Vaux-le-Vicomte, a castle in the southeast of Paris, he hired André Le Nôtre, the architect of Vaux-le-Vicomte to visualise this power.

And to visualise this power even more, inconceivable forces at the time had to be used. As he did not like the fact that freshly planted small trees inside the garden would need decades to grow, trees of a proper size had to be brought into Versailles from all corners of France. In order to do so, machines had to be constructed to be able to transport these gigantic trees. And to make the view from the mirror cabinet of the palace overlooking the garden a remarkable one and to be able to lengthen the channel, a hill had to be removed.

After the French Revolution the castle and the garden became an abandoned place. Nobody lived there anymore. The garden lost its purpose and its meaning. The power had moved somewhere else.

...Order is vulnerable. If you take something out of a certain order, the whole system can collapse.

Rituals

Portrait II: Rudi and the breakfast meditation

Rudi is someone with a great love for rituals. Especially morning ones. Without these, it is hard for him to start the day. These morning rituals mainly circle around the topic of breakfast. He drinks black tea. Very strong. With fresh lemon squeezed into it and sugar. He eats several pieces of bread. Typical German sourdough bread. He coats every piece with a different kind of topping. He is very creative in it. For example tuna, capers and garden radish. Pepper on top. The garden radish neatly sliced. The whole sandwich looks neat and decorated. Every piece of Rudi's breakfast looks like a piece of art. While creating this art and eating it up slowly, thoroughly, full with enjoyment and in peace with himself, he listens to Bayern2 talking radio. This breakfast can take up

to two hours. He is finished, when he is finished. Time is a very important part in the whole game. Nothing and nobody should interrupt this process. Every time I used to join Rudi for this ritual, I had the deep need of a nap afterwards. While he was finally in the mood of starting the day, mine almost ended.

Theories

Some theories seem to be hard to understand and seem to make things more complicated but often the contrary is the case. Theories are just another system, another tool used to create order. They make it possible to have a look from a different point of view and to re-order and expand our brains and thoughts and to help to find new ideas and possibilities. They help us to explain where there are no explanations yet.

"The word *chaos* is nowadays understood in the sense of a *big mess*. It is a symbolic term for unclear and unmanageable situations that seem

not to be part of a legality. An antonym to *order*, *norm* and *legitimate*.

Chaos is initially not a scientific term. Because a scientist suspects behind, what colloquially is seen as *chaotic*, legality and regularity, that is not readily perceptible." ¹⁰

Ochaos und Ordnung, Formen der Selbstorganisation in Natur und Gesellschaft, herausgegeben von Günter Küppers, Reclam, Uwe an der Heiden, Chaos und Ordnung, Zufall und Notwenidokeit

"A very marginal change in the initial position can lead into a totally different result."

That's how Daniel Stich, doctor of geophysics and physics docent at the University of Granada, explained the chaos theory to me in one sentence.

After also reading about the chaos theory, I had an "Eureka moment" when the following happened:

A theory in practicality

On a typical cleaning-the-house-Saturday, I had to take away the recycling. In my left hand, I was carrying a big bag with paper and a plastic bag with plastic. Over my right shoulder I carried a textile bag filled

with old glass. It was a bag filled to the top with different glasses, like wine bottles, jars, juice bottles. On top was a big jar squashed upside down between some bottles. It was squashed too tight into the textile bag. While walking, it suddenly popped out. It popped out and fell down. At that very moment, I was about to cross a small street. The glass fell down but only broke a bit, started to roll. It rolled onto the street. A car turned right and drove over the glass. The driver saw me, saw the glass but didn't care. I was about to stop the car, to catch the glass. It was too late. I was worried about all the bikes around. The glass was totally smashed into little pieces. No way to pick up the leftovers. I carried on. With an uncomfortable feeling in my head. I went to the recycling bins, emptied my bags, turned around and walked back. Already from the distance I could see three kids cycling and about to cross that very same street with my smashed jar on it. One boy had a bmx-bike. By the way he behaved on that bike one could tell, that it meant a lot to him. My uncomfortable feeling got stronger. When the other boy and the girl first crossed the street, my heart almost stopped and I've watched carefully where they've crossed. All good. The bmxboy crossed. A bit cocky, a bit dangling, trying to do a little jump over the kerb. In typical bmx-manner. At a slightly different spot. Again my heart almost stopped. But it looked ok. I've walked further. Suddenly I've past them. The back tyre of the bmx was as flat as a pancake. "Can you still cycle?", the girl asked.

If I would have used a different bag, would have filled the bag slightly differently, would have walked slightly slower or faster, the glass would have fallen slightly differently, would have broken slightly differently, would have rolled slightly differently, the driver would have driven slightly slower or faster, I would have reacted slightly quicker, the kids would have been slightly slower, faster, cycled only slightly differently or the boy would have been slightly less cocky..., then there would have been no flat tyre.

...Chaos is a constant possibility. But not a necessity.

...And chaos is certainly quite often quite uncomfortable.

To me, the chaos theory explained a small incident but it is used and over the last decades gained a lot of interest in parts of very different scientific fields such as: meteorology, psychology, history, mathematics, astronomy, social science. "Constantly new chaotic phenomenons are discovered or well-known phenomenons seen under another perspective (as for example the rhythm of the heartbeat).[...] One of the dates of founding of the chaos research began with the proof of an impossibility: In the beginning of the 1960's the meteorologist Edward Lorenz managed to demonstrate with computer based numeric methods, the medium-term non-forseeability of open systems in the thermodynamic disequilibrium."11

Talking of chaos in relation to the chaos theory, Appeal der Chaosforschung für it mostly means talking about deterministic chaos. "This term takes off the gloves with the idea, that an event based on strict laws or a structure based on exact rules can have the character of

11 Ibid. Günter Schiepek, Der die Psychologie,

¹² Ibid., Uwe an der Heiden, Chaos und Ordnung, Zufall und Notwenidgkeit

randomness and a seemingly missing order."12 Determinism states the idea that the outcome of an actual situation will always be the same, even if it gets repeated. That there is no free will. Chaos as a regularity, as something that has to happen. Chaos as a form of order. No good news for the boy with the flat tyre though...

Laws

The interesting thing about laws in science is, that different from the laws of a society, politics or economics they cannot be changed. They are what they are.

What makes the second law of thermodynamics an interesting one is, that it is a law where an important component is disorder. Entropy.

"An example of a reversible process is ideally forcing a flow through a constricted pipe. Ideal means no boundary layer losses. As the flow moves through the constriction, the pressure, temperature and velocity change, but these variables return to their original values downstream of the constriction. The state of the gas returns to its original conditions

and the change of entropy of the system is zero. Engineers call such a process an isentropic process. Isentropic means constant entropy.

The second law states that if the physical process is irreversible, the combined entropy of the system and the environment must increase. The final entropy must be greater than the initial entropy for an irreversible process:

Sf > Si (irreversible process)

An example of an irreversible process is the problem discussed in the second paragraph. A hot object is put in contact with a cold object. Eventually, they both achieve the same equilibrium temperature. If we then separate the objects they remain at the equilibrium temperature and do not naturally return to their original temperatures. The process of bringing them to the same temperature is irreversible."13

The second law of thermodynamics is the law of falling apart. The law of spreading without reverse. The law of no way 13 https://www.grc.nasa.gov/ back. The law of the end of everything. The law of the end of the universe (if the theories are right...).

www/k-12/airplane/ thermo2.html

feelings

Romance

If we gaze into the chaotic deepness of a starry night or walk through unordered, wild woods, observe a stormy sea or look at rough mountains. Our eyes and minds find their ease on looking at the natural visual disorder that surrounds us. We breathe.

Is it the possibility to get lost in the infinite chaos that makes us loosen up until we almost come to the point of not thinking? "Two things fill the mind with ever new and increasing admiration and reverence, the more frequently and persistently one's meditation deals with them: the starry sky above me and the moral law within me. [...] The first sight, of a countless multitude of worlds, annihilates, as it were, my importance as an animal creature that, after having for a short time been provided (one knows not how) with vital force, must give back again to the planet (a mere dot in the universe) the matter from which it came."14

Things are brought back into perspective by endlessness, deepness, wildness, force and size. The idea sinking in that we are dependent on all of it and it easily exists without us. This is, what brings order into our inner chaos.

¹⁴ Immanuel Kant, Kritik der praktischen Vernunft, Reclam 15 Italo Calvino, Herr Palo-

mar, Fischer Verlag

But then: Italo Calvino's hero Mr. Palomar tries to use the universe as a mirror and gets lost. "contemplating the stars he has become accustomed considering himself an anonymous and corporal dot, almost forgetting that he exists. To deal with human beings he cannot help himself involving himself and he no longer knows where his self is to be found."15 The romantic getting-lost can even become a threat to one's existence as one feels so small and looses contact with one's surrounding. Too meaningless, too little. A dot.

Two different perspectives on being a dot. With two oppositional out-

comes. But both start with a romantic eye; the deep look into a starry night...

Love

Foucault quoted in the preface of The Order of Things the following: "This book first arose out of a passage in Borges, out of the laughter that shattered, as I read the passage, all the familiar landmarks of my thought - our thought that bears the stamp of our age and our geography breaking up all the ordered surfaces and all the planes with which we are accustomed to tame the wild profusion of existing things, and continuing long afterwards to disturb and threaten with collapse out ageold distinction between the Same and the Other. This passage quotes a 'certain Chinese encyclopaedia' in which it is written that 'animals are divided into: (a) belonging to the Emperor, (b) embalmed, (c) tame, (d) sucking picks, (e) sirens, (f) fabulous, (g) stray dogs, (h), included in the present classification, (i) frenzied, (innumerable), (k) drawn with a very fine camelhair brush, (l) et cetera, (m) having just broken the water pitcher (n), that from a long way off look like flies'. In the wonderment of this taxonomy, the thing we apprehend in one great leap, the thing that, by means of the fable, is demonstrated as the exotic charm of another system of thought, is the limitation of our ¹⁶ Michel Foucault, The Order of Things, own, the stark impossibility of thinking that."16 Vintage Books

What a beautiful thought. And yet, isn't there something eccentric about any form of order? Even in the most ordinary way? Everyone has a personal view on order and how it should be achieved and that makes it also eccentric and "the Other". If it is the simple and unique ritual of how someone orders his own house or if it is an archive:

- Inside the famous video work *Grosse Fatigue* of Camille Hernot, are sequences to be found, with a conservator of the Natural History Museum in Washington D.C. He takes preserved exotic birds out of cupboards, looks at them, puts them back. He touches and treats them in a most tender way. It is clear, that these birds are his passion.

- Johann Wolfgang von Goethe went on his famous Italian journey after quitting his minister job. He had a great interest in geology. During his travel, he collected around 3,000 stones and rocks, and sent them home in a parcel, every time he collected enough new ones.
- The Voyager mission: two golden records wait to be played by aliens since 1977. "This is a present from a small, distant world, a token of our sounds, our science, our images, our music, our thoughts and our feelings. We are attempting to survive our time so we may live into yours," are Jimmy Carters words written onto the records. If the aliens manage to play them, they will be able to listen to Beethoven, Mozart, Louis Armstrong or a wedding song from Peru. They will hear volcanoes, crickets and tractors. Listening to greetings in Akkadian (a language that was spoken 6,000 years ago) or Wu (modern Chinese) and look at scenes from planet earth. This is how we lick, eat and drink. This is how we conceive and this is a supermarket. Our planet described in a simple and "the Same" way.

These phonographic records will last an estimated 500 million years. They will still be there if we aren't anymore. They are there to be found by someone completely unknown, somewhere completely unknown. Somewhere, none of us will ever be able to reach. In about 40,000 years, Voyager 1 and Voyager 2 will each come to within about 1.8 light-years of two separate stars: Voyager 1 will have approached star Gliese 445, located in the constellation Camelopardalis; and Voyager 2 will have approached star Ross 248, located in the constellation of Andromeda.

A dead, conserved and stuffed bird kept in a museum cupboard is quite awkward. It is an act of absurdity to do something like that from an objective point of view. So is Goethe's collection of rocks or the golden records.

But there is also a strange beauty to it. The act of collecting, storing or even the effort of the transport (in Goethe's case) alone can be seen as an act of love. Love for the subject and an interest in bringing it into a different environment, showing it to another audience. A deep wish to keep things for further generations, to collect knowledge. How (some-

times) eccentric, how "the Same", "the Other" and how beautiful.

The inner archive

Tonight while cycling, I've passed by a guy. He smelled quite intensely, even from the distance. Immediately mixed feelings popped up inside of me. My eyes opened wide. My brain suddenly was awake and worked like crazy. I've known that cologne. It was something, someone from my past. Inside certain books got taken out, put onto the library table, got thumbed through. It was something from a long time ago. Black and green clothes popped up, something sexual popped up, someone not fitting popped up. I've arrived at my inner section of dislikeable guys. In the split of a second. The guy I've passed, had nothing to do with it. He just had the same cheap cologne.

Our brain contains an immense archive. We are able to memorise an incredible amount of different smells and scents (about 10,000 of them), but also pictures, colours, sounds, feelings. They can get connected criss-cross. They build our past, our memory. This is us.

...Does that inner archive have anything to do with our need of outer archives and order in general?

Portrait III: Frau Korn

Frau Korn died last week. Frau Korn was 94 years old. She was my mom's neighbour and I used to clean for her a couple years ago. Frau Korn was a very correct person, disciplined to the last bit. Never complaining. All the things she was still able to do, she did herself. She lived a small and organised life and smoked like a chimney.

Frau Korn archived the weather. On a double-sided A4 portrait calendar she got as a give-away from the local bank. She made her notes every single day in tiny letters onto the tiny lines. If we discussed the weather while I was cleaning her house and compared it with the weather of the last year, she mostly tended to have doubts about what I have said. So she got up and took her little calendar to prove me wrong.

Portrait IV: Engelberts archive in a jacket

I went for a Christmas dinner with my mom and her friends. They are all in their 70's and 80's. Among them is Engelbert. Engelbert has one great passion. He is a mushroom collector. To his wife's annoyance, he does carry around photos of his all-time favourites and his latest and biggest catches and discoveries inside the inner pocket of his jacket. If he meets someone he hasn't seen in a while, he gets a sparkle in his eyes, takes out these photographs from his pockets and shows them around. To keep his wife calm, he always has one photo of her being in the woods with him in between. I get to see these pictures once a year at the Christmas dinner. *Craterellus cornucopioides. Morchella esculenta. Boletus edulis. Cantharellus cibarius.*

Portrait V: The Alps in a folder

There is a friend I call the little mountain-machine. He dislikes that very much. But he likes hiking very much. Wolfi is not very tall but has two very strong and beefy legs to carry him. We started hiking together. But then I moved away from the mountains. Wolfi continued. Like a machine. The little mountain-machine. Wolfi mechanised his way of hiking. In the summer before he criss-crosses the Alps for several weeks, he works out his route, writes it down precisely, with directions, mountain tops included, hours of hiking per day, huts to stay at. Every evening during his hike, he writes down on another sheet of paper, if the route stayed like planned, changes involved, weather conditions, conditions of the route, actual hiking hours. To complete the archive, he makes a photo of every hut, he stayed at or ate at during the day. He also makes a photo of every mountain top he has been on. Summits are Wolfi's collectors item. And as it seems to be the way with collectors: they can't stop collecting, there always needs to be another item, but they often loose the interest quite quickly and something new has to be in reach. The collecting becomes an addiction. One has to hike for 40 years and make 25 summits a year to have been on 1,000 summits. The Alps consist of more then 30,000 summits. A Sisyphean task.

Although Wolfi sometimes might turn into the unconscious collectors freak, he is also aware of a lot of things happening. He also functions as a seismograph of the Alps. In the sense of how the Alps are changing. He would not like to collect the Matterhorn, one of the most famous mountains of the Alps. Even though it would be tempting as a mountaineer, he does not like the fact that he would have to stand in line to get on top. With worries he can see that hiking has became fashionable. People pay to get on top whatever the costs are.

And his photographs also sometimes let us see the drastic changes in the environment. That the glaciers are disappearing and that mountains have became fun parks and temples of commerce.

Wolfi archives for himself. To not forget. Where he was, how he was and who offers the best Kaiserschmarrn. But his leisure and pleasure unwillingly also turned into something different: a documentation of things to be lost.

Control

"Here am I floating 'round my tin can Far above the moon Planet Earth is blue And there's nothing I can do." - David Bowie -

Order and control are not the same but they are best mates. They clap each others shoulders and say "well done":

Portrait VI: C. in order and out of control or the other way around

A friend of mine from my class, C., talks mainly about control when she talks about order. She had a psychosis last year. It was her third one. For me it was the first time to witness it. During this period C. was pure detail. She was part of another form of order that we could not trespass. She observed and connected things in a special way.

One evening during class, she started to freak out because we were all

accidently wearing blue shirts. Twelve very different people all wearing blue shirts at the same meeting is quite a coincidence. And no one actually noticed. Besides C. Different colours had different meanings to her, were codes. So were the shirts. An order that nobody informed her about and she felt excluded from. It made her feel out of control inside of her own system.

Looking at it from the distance, from "outside", one could say that she acted weird. But only because what we have set up as reality and as normal has a certain form, certain rules and contain certain behaviour. An order that wasn't hers anymore. An order she didn't fit in anymore. For her on the other hand, everything was just under control. For her there was pure order. Her order. An order we didn't fit in. A control we couldn't be aware of. An order that was created in her own kingdom and that was not accessible to us.

Two realities, two different forms of order, two different forms of being in control.

C. explained to me, that the most difficult part in this period was not the time during the psychosis, it was the part between her reality and ours. The time of transformation between these two worlds. Suddenly she was in no man's land. A land of no rules, no control. A land of pure chaos. She was wandering back and forth between the two countries of reality. Not part of the one nor the other. Which created disbelief. She couldn't tell anymore what was real and what wasn't.

She felt in control in- and outside of her psychosis but not during the no-man's-land-period. There was no guidance to follow, the rules and laws were a blur. Moments of fear...

Fear (welcome to limboland)

Chaos can be a great producer of fear. Fear of the unknown. Fear of the in-between. The limbo. Uncertainty and the circumstance of floating can create feelings of discomfort. Unexpected changes through the breakout of chaos and the not yet knowing of what kind of order has to

follow. It is more likely even that the chaos itself does not produce the fear, rather limboland that is causing it.

The no man's land between the borders of two countries doesn't belong to anyone, it has no rules, no law, "but it cannot be entered uncontroled." It is chaos, that is surrounded by order.

¹⁷ Lucius Burghardt, Wo Anna das ersten Mal einen Kuss bekam ¹⁸ Lucius Burghardt, Warum ist Landschaft schön?, Martin Schmitz Verlag

But it is also the land "where George shot off his first self-made rocket and Anna got her first kiss" 18. It is a land of shadows to hide in. It is complete freedom.

... Again: is freedom chaotic? What makes freedom scary?

No rules and no law give nothing to hold onto. Limbo is full of chances but nothing to grasp. It is a hide-away and something to run from. It is undefined. It is walking around without glasses when you are short-sighted.

pop-up

During his trial in Israel, Adolf Eichmann, the constructor of the systematic murder of 6 million people, got asked by the judge if he ever felt anything about killing all these people. He answered, that he only followed his instructions and that he personally didn't kill anyone. The judge got more persistent. Finally, Eichmann gave an answer. He told a story, about one time he went east to a concentration camp. He was driving in a car alongside some fields. A large number of people had just been killed in these fields and buried in a mass grave. Fountains of blood came out of the soil while he was driving along. He felt. For a brief moment chaos popped up. The mass grave was his order but the visibility through the blood fountains turned it into chaos.

Eichmann's world was in order behind his desk, his white papers, folders and numbers and in his precise way of working. The task of getting trains filled with people and moving in the right direction, the logistics of killing.

.... Does chaos only exist for us if it becomes visualised in front of our eyes?

Portrait VII: Y and the less (John Cage 4:33)

Most people somehow archive, store and keep things, Y. does the opposite. The opposite of hoarding. She wants to get rid of things, as many things as possible. She holds the deep feeling that it's keeping her back. That things are past. That past is no good. She told me, that she ripped apart all her photos and that she threw them away. Her visible past needed to be gone. De-materialised. I also receive a lot of things from her lately, useful things that I am happy to have. Bike locks, shirts, a usb-stick. Actually nothing useless, like bibelot. But still, it's too much for her. She wants to empty, she wants to breathe. Things... seem to take away her oxygen.

Over the last weeks, while we sit at work together, she reads through staples of A5 sheets of paper. Thoroughly filled with handwritten text. Some underlined. Almost no space left on each page. All written with the same pen. Notes. Many notes. Her notes. An archive she wrote herself over the years. Notes and quotes from years of reading in the library. Knowledge. Her knowledge. She reads through everything once. The parts she still finds interesting, she tries to get into her head, even to internalise the meaning of it, so she can throw away the paper. The rest is there to be forgotten. She says: "das ist doch Atommüll!", it is nuclear waste.

She is de-archiving her knowledge, is physically emptying the space in and around her. I wonder what will happen, if it is empty enough? Will it be filled again? Or will she keep the whiteness? It is easily possible with things. It only means the choice of a certain lifestyle. Like a monk. But how about the knowledge? Will she stop learning? Or will she only make more careful decisions of what she wants to know? I am curious.

chaintimepointofviewsystemsfeelingspop-up

There is no such thing as complete and absolute order. There is maybe not even order. Maybe everything is only chaos or everything is only order. There is a dream about order, a fata morgana in front of us. A longing for. In this bewildering task of being. There is this fear to drown in the chaos. More generations, more people, more chaos. But this romantic longing for order also creates new chaos.

Everything is everything. Everything that counts for order, also counts for chaos and vice versa. There is no ordering for the two, no separation. Chaos and order and all their parts belong to a chain, have a point of view, added systems and feelings. All is liquid. Everything flows into each other, fights against. There will be no solution. Systems are individual. Order is individual. What is your order will more likely not be mine. What is your will, will more likely not be mine. Things will be fatal and things will be o.k... *Gestern war noch alles in Ordnung...* and maybe tomorrow it will be again.

Thankyouthankyou

Een dikke zoen voor Saskia van Oenen; meine Portraitmenschen: Engelbert, Rudi, Wolfi, C. und Y. In Gedenken an Frau Korn und Hilde; und Ja! MAMI für einfach alles... und auch Flo – Wurstpackerl rule! And who would have that of that: Joe for being English; Charlott und Marion fürs Aushalten und Charles Mingus fürs Antreiben und Durchquietschen durch chaotische Gehörgänge und Gehirnwindungen.

Consulted knowledge

Books

Editor Günter Küppers: Chaos und Ordnung - Formen der Selbstorgani-

sation in Natur und Gesellschaft, Reclam

George Perec: Species of Spaces and Other Pieces, Penguin Classics

Stanislav Zámečnik: Das war Dachau, Fischer Verlag

Hannah Ahrendt: Eichmann in Jerusalem, Penguin Classics

Editors Jorine Seijdel, Liesbeth Melis: Open! Key Texts 2004-2012,

SKOR nai010 publishers

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Italo Calvino: Herr Palomar, Fischer Verlag

Martin Heidegger: Die Frage nach dem Ding, Max Niemeyer Verlag,

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David Devorkin and Robert W. Smith: *Hubble: Imaging Space and Time*, Washington, D.C.: Smithsonian National Air and Space

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Simon Singh: Big Bang: The Most Important Scientific Discovery of All

Time and why You Need to Know about it, Fourth Estate, 2004

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Films

Clara Glynn: Adolf Eichmann - Begegnung mit einem Mörder Rony Brauman and Eyal Sivan: Eichmann in Jerusalem

Claudia Heuermann: A Bookshelf on Top of the Sky: Twelve Stories

About John Zorn

How to Prepare a Piano with Stephen Drury: www.youtube.com/

watch?v=myXAUEuECqQ

Jim Al-Khalili: Order and Disorder, Part 1 Energy

Stephen Hawking: Into the Universe with Stephen Hawking: Did God

Create the Universe?; The Story of Everything

Video works

Camille Hernot: Grosse Fatigue, Moma NYC

Mario Garcia Torres an Alan Page: The Causality of Hesitance,

Exhibtion: Seth Siegelaub: Beyond Conceptual Art, Stedelijk Museum,

Amsterdam

Music

Charles Mingus: Tijuana Moods; Moanin' (2h version); The Black Saint

and the Sinner Lady; Mingus Ah-Uhm

Sun Ra: Cosmos; Nuclear War; Outer Spaceways Incorporated;

Space is the Place John Zorn: Spillane

John Cage: Bacchanale; Sonata II for Prepared Piano; The Perilious

Night; Amores

John Lurie National Orchestra: If I Sleep the Plane Will Crash

Concerts

John Zorn's The Stone NYC: *Phalanx Ambassadors* Dutch National Opera: *Only the Sound Remains*