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Conference report

SOPHISTICATION CONFERENCE #2 IN »LIEU« OF STATEMENTS, »ARTICULATIONS«

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I. Introduction:

How can we find a novel understanding of human intellectuality in co-existence with artificial intelligence? The Sophistication Conferences are dedicated to a basic kind of literacy in how to think about coding in the terms of a geometry of spectra and communication. At the core of such a literacy is a different relationality of time, nature, subject, and object. Our interest is in a philosophy of the transcendental objective, at whose core resides the question of »how to embrace what presents itself as an obstacle« rather than how to make it »go away«. We see in such a »digital gnomonics« a powerful framework for addressing computational modeling, machine learning and algorithmic reasoning in a manner that does not stage an antagonistic competition between human and artificial intelligence.

The Sophistication Conferences are organized once a year at the Technical University Vienna, as a cooperation between the Department for Architecture Theory and Philosophy of Technics ATTP and the laboratory for applied virtuality at the chair for CAAD ETH Zurich, where we invite distinguished as well as young scholars from different fields to think about how such »architectonic intellectuality« affects our relations to the world at large – our institutions, as well as our ordinary daily lives.

III. Speeches:

OPENING SESSION:

III1. IN »LIEU« OF STATEMENTS:

The talk was given by Vera Bühlmann, from TU Vienna. It was about “domestic architectonics” as Capital concept. The speech was started by citing Alberti’s character and some important facts about his works and philosophy. Alberti chooses literary domains to express what he has to say rather than those of practical treatise or of learned commentary and explanation. For him the law and the city are mutually implicative neither one pre-exists before the other, they call each other force. Alberti’s architectonic reason as the Professor Vera wanted to demonstrate is pervaded by translating between canons in the young and emerging cities with the novel kind of autonomy. It is perhaps the first time that such translation becomes possible.

One important question in the beginning of the speech was “How to think about a domestic kind of architectonics?”

In the beginning of coding literacy part, many important new terms and concepts have been mentioned and clarified as following:

- Rhetorical coding* that proceeds politically involves the manner of reasoning that is conductive and current and progressive as well as iterative.

- Rather than speaking of Alberti’s technic as allographic as Mario Carbo has recently done, *we ought to speak of it as cryptographic*.

- The difference is *substantial*, while *allographic* is a term with regards to how meaning is to be represented, *cryptographic* is a term with regards to how the articulation of meaning can be socialized and cultivated. The latter is passionate for how to invent manners of how meaning can be addressed legitimately.

- The lines of mathematical reasoning are like excitable strings on an instrument that can be played upon this is WHAT articulation coding does is founding a city if we understand it in analogy to how knowledge can be established by mathematics.

- It is not something that happens at one point and then remains the increasingly distant reference through time for all that happens after.

- More interesting is the abstract and yet domestic domain from where-within statements and arguments are being crafted.

Related to the topic “founding a city”, Professor Vera asserted through her speech that what we need to understand is how such maps can be count as original maps as of the original Rome, only this originality has never ceased to be alive.

Architecture manifest *how there is aging to originality*. Therefore, already for the truth not only building and cities but the specially also agnomens and machines where constitutive for architecture.

One crucial point in the end of this part was about “stasis”. Knowing well about how intricate it is to ask questions in order to find what in ancient rhetoric was called a **stasis** or a common ground.

Finally, she suggested to regard concepts within such domestic architectonics as Capital concepts - concepts that do not delineate but that are conductive, concepts that establish what is “frequent” and “current”, concepts that do not contain meaning but offer spaces to accommodate it.

Capital concepts are conductive rather than delineating They are presuming and excitable concepts. They are not symbolic. They don’t capture they offer. Most

important that they are reasonable but without making sense. Moreover, they are excitable that they lack direction. They are incorporate intellectually what it means to have a body that can be absent, and they know that they are nothing on their own.

In the end of the speech, Professor Vera asserted that Through such domestic architectonic reason drawn to excitement and interest yet subscribing itself to the task of translation and diplomacy more than judgment and classification is how we can find in an exemplary manner in Alberti's reason that reflects about itself in what I would like to call a cornucopian manner.

In the end of the last part, she summarises the relation between architecture and theory as following: Theory and Architecture tends to produce instruments that sound the bottom that never exhaustively be fastened, because the more it is sounded the deeper it reaches.

She recommended to find a way for instant to pass through prophecy. Perhaps there is no architectonic articulation without prophecy. Perhaps this can open up a novel relation between classic and modern as one of being-with, rather than one of being after.

What I found very interesting and influencing is the following concept that conclude the most important ideas of the whole speech:

It is very essential to now how to play the instruments of a domestic architectonic sources sounds from clamorous absurdity of noise in finding ever new translations from an acoustic and responsive domain of harmonics to the visual and imaginary domain of geometry.

II2. MOBILE YET IMMOBILE:

The speech was given by Georg Fassl, from TU Vienna, the talk was about physic's Movement and Rest compared with architecture's Mobile and Immobile. He began with a quote from Jean Francois lyotard about the fabric of relations that is now more complex and mobile than ever before.

To make the topic clearer, he stated the following key questions in the beginning of the speech:

What is the Mobile, what is the Immobile, and what could they be for us?

Then he began to answer the question about the definition of Immobile through different points of view. *In German language* the adjective mobile forms the

etymological root for the concept “Möbel”, whereas *its English* equivalent “furniture” leads us contrarily to the act of supplying or providing.

Its linguistic opposite, “immobile”, in turn informs our understanding of real-estate, which itself, conceptually, partners the German “immobile” with a rightful owner.

Having a look into *property law* we can find the movable and immovable as the basic division of things. Movability here is proved when one can transport the thing without losing its substance which was also emphasised by Immanuel Kant in his philosophy of law where he tells further

Astronomically instead our ground counts as mobile itself since Copernicus and physically since Newton motion and rest there anyhow conditions of one on the same body. Bodies exist in the play of forces are understood as being negotiation as in Villain flosses formulation.

Then to make it more complex, he gave an example about *the country* that is apparently an immobile thing, *but Poland has moved toward the west*.

Then he stated the next part with the question *about how can we think the mobile and immobile measure and calculate with them?*

Most important in this past was the *Daedalus observatory*, when the lecturer reported from the contemporary lookout. Trying to set up a fitter and more abstract and generous criterion by the means of architecture. One which is charged by the conditions has derived from intuitively and is measured by itself and will consequently be lesser a fixed standard of judgment then a kind of character or notion to see think and articulate with. *The mobile yet immobile yet wandering, wandering yet winding, winding yet twist, twist yet pervert, pervert yet generate, the generate yet fast, fast yet immobile, mobile yet immobile*

Then he discussed the motion of the cosmos. They founded their understanding in the act of seeing things in relation, one could say architectonically and began to study their nature somewhere similar as we do it today.

Then he talked about Galileo’s experiments in telescopic observation. His discoveries of several of his contemporaries initiated post Aristotelian, Newtonian and prospectively the modern way of thinking about architectural statics. Questioning not for lesser solidity just looking for somewhere else.

In order to relate the prior theories and experiments with architecture, he asked the following question:

How we can architectural relate forms of mobility at all when building would mean to consequently immobilize or grounded?

Then he clarified the notion *Stasis* which means standing still a different kind of stability.

Most interesting for me was the concept that” *Opening spaces of everyday life while having an eye on the world at large. Invented objects not afraid but inspired by the unknown not real estate but real likeness or mobile statues.*”

EUROPE

II3. OF A GHOST AND ITS RESURRECTION: MARIA ZAMBRANO ON THE AGONY OF EUROPE:

The lecture was given by Rodolphe Gasché from State University of New York in Buffalo. It was mainly organized to clarify and discuss one the famous statement about Europe in *La Agonia de Europa* by Maria Zambrano.

Many important questions were stated in the beginning of the lecture. Some of them:

How to understand the following statement in *La Agonia de Europa*, Maria Zambrano “*Europe is not dead, Europe cannot die completely; it agonizes. For Europe is perhaps the only thing – in history – that cannot die; it is the only thing capable of resurrection.*”?

What must Europe be for it not being able to completely die, but only to agonize?

How to understand the mode of being Europe as one of continuous agonization?

What kind of resurrection does European life refer to, and what is its significance in the context of Zambrano’s heretical Christianity?

Then he stated the fact that the idea of Europe that has always emerged in periods when Europe found itself in a deep crisis. And then said that the current risk of the union’s breakup seems to suggest on the contrary that Europe is in the throes of radical crisis.

Then he emphasised the impotence of the following question to be considered: whether the concept of crisis not only historically but essentially intertwined with the idea of Europe itself?

From Professor Rodolphe point of view is to speak of Europe is not only to bespeak the crisis that it suffers but to think your positively from and in terms of crisis.

Hence, he suggested to consider the possibility not simply that Europe lives in crisis including the latest where such crisis no longer seems to provide from itself the means to resolve it, but the crisis is the congenital way of life of Europe.

He is convinced also that only in crisis Europe is or can be what it is, that's understood the crisis is not something to be lamented rather than putting Europe simply into a jeopardy. It is what injects life into it.

Furthermore, in his opinion, the task to save Europe is now incumbent on Spain but if Spain deserves its role not in the sense of political unity of overstate. What makes Spain into the potential savior of Europe is Zambrano holds "the incorruptible will of its people".

He mentioned: even more important is that Spain has developed a specific mode no where else to be found in Europe. In order to be able to assume this rule of saving Europe Spain Zambrano's are at first needs to be born. He adds that Europe is only about to be born in its unity. It has to find its very own or proper originality that means that the birth of Europe can only occur after complete decline or fall of European imperialism.

In the last chapter of his speech he stated the fact that the resurrection is not a resuscitation from the dead. "The uprising, the raising or the lifting of a vertically perpendicular to the horizontality of the tomb not leaving it, not reducing it to nothingness but affirming in it the stance that's also the reserve of an untouchable and inaccessible". Resurrection consequently is a raising up in death with respect to death at the same time prevents or restraints what comes into a stand from being appropriated and bereft of itself where it is turned as in Christian religion or popular belief into a moment in a process of sense.

Most interesting for me was the concept that "*The Life is not life if it finds its end and completion in death*". Life of human life of finite begins is life only if it is mortal. If it is life as a perpetual dying such life is the infinite life the infantry finite life of finite beings. If Europe cannot completely die if it again and again resurrects, is it not because paradoxically, it is the conception of a form of life that is that over humanity that experience its radical finitude.

II4. SAVING LE DIFFÉREND (AT LEAST TO PRESERVE THE HONOR OF THINKING):

The speech was given by Gregg Lambert from Syracuse University. It was about the concept of le differend which was invented to respond to the following situation:

let us imagine that the universe of damages is infinitely larger, quantitatively

speaking, then a finite number of wrongs (torts). At what point, one might reasonably ask, when does a damage rise to the level of being recognized as a wrong, and how is this a concern of political philosophy?

First, he clarified *the quote that the title was taken from*. It is taken from pretty much the beginning section of the different in the section on the dossier where this statement appears and translated to find if not to be able to legitimate judgment which is what the talk is going to be about and leotard in other words how to save the honour of thinking.

Then he began to discuss the core point of the speech by mentioning that much of leotard's effort and last works is to create what he calls passages between *three senses of the archipelago*.

The first sense: the dispersion of Kant's late political writing on politics do not form a systematic critique of political reason but nevertheless may constitute a preliminary map of the future critique.

Second sense: the dispersion of the faculties is exemplarily dramatized in Kant which can no longer be regulated or legislated by the understanding and the speculative interest of reason. In this example the faculty of judgment if it is indeed a faculty at all or is called it simply a power of judging.

Third sense of an image of archipelago is the dispersion of the idea of human community. The idea of word into an archipelago of *what he called continental islands*.

But the essential question by Professor Gregg was *how can we judge that there is a differend when, according to the situation, the referent of the victim is not the object of a phrase, nor an object of cognition properly speaking?*

As professor Gregg mentioned: *Europe is a continental island in an archipelago of other islands* such as the America, Asia and Africa. This contemporary archipelago of political reason which reveals gaps between different human communities and even between different histories that no longer belong to the same past and consequently may no longer share the same future. As a result, we are presented with the loss of an idea that represents even in regulative purely virtual or schematic manner the completely exertion of a community of reasonable beings in the form of a word, which was formerly an object of philosophical representation or what leotard calls a phrase regime.

Then he discussed the statement that human European community has formerly enjoyed the role of its protagonist in the philosophical novel.

In the second part he talked about the beginning of the differend. It was in three cases (the critical tribunal):

The first case which is the most commonly associated is the testimony of the Holocaust victim concerning the reality of gas chambers.

The second case of judgement appears is the judgement and this is an interesting one of anonymous masterpieces.

The third case it is drawn from the satirical Russian novel the Yawning Heights by Aleksandr Zinoviev.

Then he concluded that in *all three cases* *Leotard conclude to the privation constituted by damage*.

In this part of the speech he talked also about Leotard's overall argument that is to engage or a battle with the two adversaries in order to save the honor of thinking especially the possibility of making good linkages between phrases of philosophy or phrases of ascetic and phrases of politics.

Then he discussed the statement by Leotard that the counting on to stand in the way of capitols hegemony is a mistake:

The first reason was about the hegemony of neoliberalism.

The second reason is because risk resistance in the name of identity, culture or community also postpones the idea of cosmopolitan history and falls back often on a fear of the return of the legitimization through the tradition or myth of fascism or racism.

In concluding his brief reflections on the archipelago of political reason today, he reminds us that the cause of the different is named a feeling of pain or privation in this case the probation felt by the imagination first for the idea progress toward a better state of political reason leading either capitulation or to a certain kind of pathological feeling of disillusionment.

MNEMOTECHNICS:

II5. ARCHITECTURE OF THE DIAPHANOUS:

By Riccardo Matteo Villa from TU Vienna. It was about the notion of transparency in architecture.

He began with the mutual relationship between transparency and modernity. The modernity is one that easily escape any sort of exact attribution. what is commonly referred by the term modern history for example is a period that goes

roughly from Renaissance to the end of World War two. and sometimes even includes contemporary history. When it comes to architecture, the term is mostly used in reference to what is called the modern movement.

Then he discussed the device of transparency, he believes that we should start by looking at 1851 which is the inauguration year of the Great Exhibition of London which is hosted under one of the largest glass building ever built The Crystal Palace. The claim of Renaissance the first modern period was a recovery and reconnection to a classical antiquity, but to create a neat line between modernity and antiquity the first necessary operation was to exclude the time that was standing in between namely the middle ages. It is done perhaps in this truly pre-modern time in between times the one of the middle ages. In this time that since alignment modernity wanted to be transparent to disappear that what we could start investigating the modern device of transparency.

Then he stated the question: How man can think the same way and the same idea of others yet have different particular thoughts and therefore, be an individual? To solve this question: this unique and transcendental mind is described by Vitruvius as diaphanous a transparent medium.

Then he clarified that transparency is not the immediacy of light. It is rather something that mediates it that stands in between. And materiality must not be misunderstood as matter that can be transformed in any idea. It is not a matter that we can sculpt or model. It also can not be considered as a proposed form that one can combine and transform in order to produce new forms and new thoughts. It is only power is to be affected by forms to literally be informed. It is absolute disposition to welcome it in potency

Then he emphasised that there is a separate intellect which is material and that carrying potency receive any form but that holds nothing in itself. Our individual mind can into the space of this intellect through speculation, through a speculative intellect. While we see our thoughts are than images or Fantasy that do not belong to our individual mind, but that are actualized at the occurrence by the agent intellect which is a function of this separate mind.

The he stated that the architecture of renaissance is perhaps the one that most embodies and makes use of this form of invention. The truthfulness of perspective drawing relies in study the matching point of the lines that stands outside of its representation and is therefore called vanishing. The vanishing point is a paradox that ensures the objectivity of its representation, but at the same time represent a point that could never be objectively grasped.

He mentioned that Michel Foucault once said, the enlightenment which discovered the liberties also invented to discipline. The transparency as immediacy once again of the modern subject one of most evident manifestation in the prisons a mechanism of control.

Then he concluded that the architecture of diaphanous is a dwelling space of absolute potency or in other words what we could call as an architecture of the diaphanous.

II6. A MIND OUTSIDE OURSELVES:

The talk was given by Roberto Bottazzi from the Bartlett School of Architecture London (UK). It was about mnemonic techniques to navigate space based on human perception. Particularly, the paper concentrated on specific moments in history in which the possibilities unleashed by the 'automatic' were first conceptualised and, to a lesser extent, spatialised.

First, he stated essential facts in this field:

- The continuum between data in algorithm is removal of compression as a cultural category from the way in which we operate.

- the Memo techniques is a subject that has been able to help if you like to design through history in this particular regard.

- Historical or traditional definition of Memo techniques still provides interesting ways of thinking about these conversations.

His concern in his lecture was about the relationship to space. Starting from the idea that any changes in the technologies changes the way in which we account the space. These changes in the technologies changes the understanding of our role and mode of intervention in it.

Then he talked about the history of the chrono files by Buckminster Fuller that started around 1922 and consists of an indexing of everything that took place in the life of American polymath. Buckminster Fuller began to devise a number of designed objects at the variety of scales that would be able to set up a dialogue between these *three domains*:

The first one was the geo scope, a series of large-scale spherical representations of the earth that should have been placed all around the world and wired with a number of electric pipes lights in order to visualize data escapes.

The second one is the game itself but only partially played New York University in 1963 in which different data escapes should have been used as a starting point for a dialogue in a mediation between different groups in order to achieve world peace.

The final one was connected to the world game. The first design by Buckminster Fuller for the Montreal World Expo in 1967 consisted of world game map

unrolled and framed by a piece of architecture itself was conceived as a viewing but also is a measuring device for these data.

So, we see a very interesting relationship between architecture, data, images and their abstractions all based on the shift in the scope horizon of the technology endowed.

Then he talked about the world of Architecture and city themselves that have often been used as computational devices through the mechanism of memory.

Related to this he mentioned one interesting concept of the city as a database or as in common terminology and in this particular case the act of walking through it being almost the algorithm of it.

Then he talked about the influence of Llull on Pico is well documented and the fascination of playing with a basic mathematical principle. Then he mentioned the difference between them. The use of the word theatre has to do with the act of making visible all this knowledge.

Finally, he talked about recent works developed at the Bartlett, here we can see how some of these conversations begin to play again today in a very different environment. They still have the same notion of a finite data. This set can change over time at any given point, their size is a finite discrete.

II.7. ON STATUES, NOMADS, AND OTHER MODES OF SUBJECTIVATION:

The talk was given by Joanna Hodge from Manchester Metropolitan University (UK). Her paper provided a brief introduction to these notions of statues, nomads and to a series of proposal concerning a possible third term articulating the space between foundation of multiplicity folds and series are possible through terms to articulate that space. The main text was about Michel Serres, statues, the second book of foundations from 1987.

She began her speech with two essential questions: How to read Michel Serres? and which conversations to put him into? The notion of the philosophy of history and what does that mean?

The discussion in her talk was to serve a bridge to consider the connections between notions of triads as chance conjunctions on noise and on interference. Furthermore, it was to show how statues and nomads are not to be thought of as competing notions. The Relocation of the discussion in terms of monads and the notion of design that is putting the discussion back into encounter.

In the first part of her speech about the philosophy of history, She said that we need to think of some kind of transmission and transition between the notion of

geo philosophy and what is philosophy and the notion of hominescence as a possible new focus of thinking.

So, her discussion was organized in three sections:

1-Introduction/foundation/grammar

2-Relocation: monads and Dasein

3-From geophilosophy to hominescence.

In total she talked about five citations, in this report I will talk about the most interesting three of them:

The Citation one:

1-The first foundation, that of the collectivity, puts the subject in relation with death. The second foundation, about which we don't know whether it precedes or follows the first, ensues from it or depends it, puts death in relation with the object.

The one makes visible and legible face be seen, since languages vie with one another to describe it, the other makes be seen the illegible and silent face, of a founding authority that has no name in any language and that assembles the authorities that we cut out under the three names of object, death and subject.

2-The second book of foundations provides a provisional horizon for these exploratory remarks.

3-Statues nomads foundations then a series of term to begin to articulate the space between what appear to be the opposed opposing notions of statue.

Statues: as the silent testimony of death in relation with objects, statue provides an instance which precedes language. Status and the origins of geometry...

While foundation then is one possible third term alongside statues and nomads are here foundations as an architectural figure and foundations as folds as multiples not as fixative in unisize.

So, the notion of foundation itself is going to start splitting and dispersing itself.

Then she talked about the question that Heidegger fail to provide an adequate answer: How do the world constituting the horizons of determined existing coalesce into a single unified world in which meanings may be supposed to be extended?

Citation three:

Accepting the third place, at risk of exclusion, the instructed third, speaking at once in the languages of the irrational and the rational and taking them toward their common silence, aspires simply to the weakness of expelling nothing.

Three different kinds of movement:

1-A movement of a history philosophy.

2-A movement of the concepts and entities and of being their relations one to another.

Citation five:

The multiple is the object of this book (Genesis) and history is its goal.

Furthermore, there is a move beyond an either/or between either seeking out origins and foundations some kind of nostalgia for never existing past or positing some kind of future towards which one might be orienting oneself rather insisting with Serres on a switch mechanism to disrupt both the temptations of expectations concerning a future and such nostalgic returns to falsely imagined origins.

II8. ANAXIMANDER IN FUKUSHIMA, GENEALOGIES OF TECHNIQUE:

The talk was given by Zissis Kotionis from University of Thessaly (GR)

The talk was about a project called a documentation of traces, a *dérive* among fragments of the technical era in post-industrial territories. Walking, collecting ruined technical apparatuses, laying down, soliloquizing the fragmentary texts of presocratic philosophers are some of the *dérive* practices.

As he mentioned the talk about a project that has finished some time ago. The lecture is more to be a recent approach to the same subject.

The hypothesis that he reflected was the following:

-What was called nature for centuries in the west have been seen from really early times in the presocratic world as nothing more than a technical construction

-Harraways term nature culture which is in our view is the metonymy of the term Anthropocene describes the fact that we can not deal with the nature as an under logical category separate from culture.

As he said in this field “we claim that the Anthropocene is a time period that doesn’t appear in the industrial era.”

Then he stated the fact that in terms of geological time, historic time is so short that even antiquity becomes an experience of synchrony. And also that the Antiquity has become part of the present in the sense that the formulation of geology by the means of human action which is tyrannically obvious today has began and developed even in the early times of antiquity. Classical antiquity has played a crucial role in conceiving and using the means for extended mineralization.

Then he talked about the current situation: we are going to questions those two metaphors:

1-The metaphor of the furnace in reference to the world cosmos.

2-The metaphor of column, a technical stone in reference to the planets.

As he clarified these questions are not philosophical ones. It is rather an operative or a performative approach.

Then he clarifies the two parts of this composite Greek word Mnemotechnic the first part means memory, and what we want through this project is to remember the earth. The other part is technic, the technic of remembering the earth. Both are techniques of assemblage, what the verb assemble originally means is collecting/gathering. After the collecting comes the process of categorizing. That is the formation of genealogies and then as a third part of Mnemotechnic comes articulation of things in new forms of being.

In the next part he described the project:

That are based on the idea that what we live today is a diachronic experience. It is both a real and imaginary voyage in the part of the voyage taken place in reality.

Found in the Greek ground a collection which is surprising. He discovered the genealogy of the apparatus that was destroyed in Fukushima. In other words, the topology of the TEPCO (the name of the company)

Then he concluded that the genealogy of vessels somehow similar to the Genealogy of frames.

In his point of view, it would be no meaning in the function of the nuclear apparatus seen as a technical fact without the involvement of what we call the elements of nature that are air, water and the mineral to be burned in the nuclear reaction. But what happened in Fukushima is neither natural nor technical.

Then he discussed that facts in a more scientific approach, the genealogy of the furnaces can be included in a general framework. The genealogy of all technical apparatus is from early antiquity in the ancient furnace to the present and the nuclear reactor prove how through technique we experience the past into the present not as a representation but rather as a Quarnic experience in our everyday

practice. Then he asserted that we have always been technical we have always been modern

In the end he asked the question: Is technical apparatus in its genealogy the only evidence on earth for the ethnicization and mineralization of the earth?

In order to answer this question, he recommended us to think not only of the technical means and their genealogy but also thinking of the natural matter. This matter above all is a stone.

Most interesting for me was what he concluded in the end of his speech” we conceived the stone as pure matter and as a metaphor of the earth by itself.”

GNOMONICS

II9. ARCHITECTURE, AN ARTIFICIAL INTELLIGENCE:

By Kristian Faschingeder, TU Vienna. The talk was about

In the beginning of the lecture, he introduced one book by Michel Serres called geometry. It presents two different political orders by which the historian Jean-Pierre Vernant traces the revolutionary transformations of Greek culture. The forerunner is the vertical hierarchy of the archaic world, pyramid-shaped, with the ruler at the top. Innovative the Greeks, who organize themselves in the plane: They line up in a circle, and those who speak to the group walk into the middle, surrounded by their listeners. The hierarchy flattens, by which the Greeks establish their famous isonomy.

Then he clarified that it's not as simple as that, Serres retorts. The big transformation, he claims, between the archaic and the Greek system relates to the change of position of the observer: there is a difference whether one sees something in profile or in plan view. Both views are representations of the same object, but no one sees, according to Serres, neither the world nor society as if they were looking at it from above. This position is “above the king, that of the mind.” This is not just a superior point of view, but “a proof of the existence of another world.” Thus, Serres explains, the Greeks invented theory; a stage of vision — *theoros* meaning spectator. “The Greeks’ production is projection. And

the optimization of a projecting site: the fly-over from on high or from outside the world.” It was only much later that architecture began to use the “turn” invented by the Greeks.

Then he added “Historically, there exists a clear conceptual separation between floor plan and elevation”. The representative character of the architecture is situated in the elevation, the organizational character in the floor plan. While an architect such as Étienne-Louis Boullée shows the sublime of his architecture des ombres and architecture ensevelie through his watercolored elevations, architecture’s emphasis will later move to the ground plan. The projection, the view from above, is what leads Le Corbusier to remark that architecture begins in the ground plan: “le plan est le générateur”, he says in 1923 in *Vers une Architecture*. The comprehensible, visible and symbolic power of the façade then moves into the sober, rational plan, quasi naturalized and imperceptible. And though the difference between archaic and Greek worldviews is based on a simple quarter turn, from a profile to a plan view — both representing the same object it appears that architecture merged these two views into one coherent system in the 15th century only.

II10. ARCHITECTURE AND DIGITAL LITERACY:

By Ludger Hovestadt from ETH Zurich (CH).

First, he stated the question: What might architecture be, if we are able to fake it by machines?

Computers are not machines. They are not tools. They are any tool. Anything goes, nothing makes sense. Computers are quantum machines. Any point is everything not. It is connected to everything. A panorama, a cypher of the world. Rich in knowing the old world. Which is dead. As a person I talk throughout this panorama to the new, strange world. Filled with aliens. They are beautiful, repugnant, demanding, dangerous and fascinating. Nothing else out there. All my senses cheated, but my intellect. Who can distinguish, whatever comes? Thinking, I can join these elements to sentences, to laws, to formations, to buildings.

II11. COMPUTATIONAL MODELING ACROSS DISCIPLINES:

The lecture is given by Vahid Moosavi from ETH Zurich (CH).

In this lecture, after a short analysis of the history of systemic modeling, He tried to describe the main elements of machine learning techniques and why they are successful in domain free manner. Finally, he showed several data driven applications in the context of architecture and urban design.

He started with the definition of the (GST): Orthogonal to the direction of disciplinary research, General Systems Theory with the vision of “finding abstract similarities in different things” was introduced in early 20th century. However, soon it ended up to generic system models and in my opinion failed in 1980s. Nevertheless, the original vision of systemic approach remains fascinating. Around the same time, machine learning as a radically different approach to the representational modeling and classical coding, started to emerge. Today, machine learning and Big Data together offer a universal way of looking at the world phenomena, which is aligned with the original vision of GST and is strongly influencing the classically expert based and disciplinary application domains.

METHODICS

II12. CRYSTALGEBRA: ARCHITECTONIC ARTICULATIONS IN CRYSTAL SPACE:

The lecture was given by Poltak Pandjaitan from ETH Zurich (CH). The research project that he presented addresses the question of how to implement and translate spatial concepts in crystal topologies. Based on interdisciplinary explorations of crystal structures and their specific characteristics, spatial paradigms are examined and implemented in the algebraic framework of crystals. The crystal space provides the setup for the architectonic articulations. Articulated thoughts and concepts epitomize different stages for elements of spatialities to join concepts of

space with the notion of topological crystals. It opens up a space of mediation and discourse. Only by setting distinct elements absolutely can communication emerge between them. These mutual discussions are to be treated like crystallized sculptures. It is not just the form that gives the expression, but the process of crystallization and development within the structure that has a narrative potential.

Crystals are characteristic elements of space, and they constitute spatialities. It is the demystification of crystals as taxonomies of architectonics. The code of crystals is the articulation of space. It represents an idea or process as much as an actual building or design. It is the principle of the code that already represents a structure, which provides a stage for spatial ideas in order to facilitate new architectonic articulations.

The project is to provide an overview of how the topic of crystals can be embedded in architecture. The goal is not to resemble and mimic these emergent crystal arrangements. Neither it is intended to show how to translate such abstract ideas into geometry or to invent new shapes. However, through the purposive abstraction and translation of spatialities combined with the notion of crystals as an algebraic code like structure, it is possible to scrutinize the meaning of space.

II13. SOPHISTICATION: GOOD SENSE AND COMMON SENSE:

The lecture was given by Sjoerd van Tuinen Rotterdam University (NL).

Of old, it has been good sense to oppose reason to common sense. The more sophisticated its mode of articulation, the greater its distance to doxa, folklore, common belief. Sophistication in good sense is thus associated less with sophistry than with the exclusivity and refinement of truth. But what if the new function of reason is no longer to criticize an already established common sense, but to care for the possible sense of the common that is everywhere lacking? Could 'true' sophistication, i.e. its higher power, lie in the inclusivity rather than exclusivity of reason? Does inclusive reason not necessarily combine refinement with sophistry in the constant enrichment of the common? Along these lines, my presentation

proposes the outline of a new genealogy of reason, starting from Leibniz's mannerist logic of versions and passing from Schelling to Whitehead and Serres.

II14. ON HYPEROBJECTS: DIGITAL MIRRORS AND THE REALITY PRINCIPLE:

The lecture was given by Georgios Tsagdis from University of Westminster (UK)

This lecture aimed to suffuse the desert of the real with the Freudian reality principle, in order to re-thematise the relation of life and death and thus explore the part of the real irrevocably lost, the part that weighs the future down and the part that might never be forsaken.

A barely dreamt dream: to upload consciousness, to upload memory, to upload the weave of life, without life itself, a digital life more living than that of the flesh: *vita realissima*. No sooner dreamt than turned into nightmare: the glory of the truest life runs up against the reality principle. From *Brave New World* to the *Matrix*, dystopia amounts to nothing other than the abandonment, exile or exclusion from the topos of reality. The human is principally attached to the real. Pain and suffering are preferable to its loss; no afterlife is welcome unless it first outbid reality in its own currency. Beaudrillard undoes the primacy of the reality principle, through an investigation of its historical contingency and obsolesce. The dream and the nightmare have already coincided, leaving behind only the nostalgia of their distinction. Yet, something is still to take place. The Beaudrillard of *Simulacra*, had barely witnessed the digital. His diagnose is a prophecy yet to be surprised.

II15. THE CITIES IN THE PLANETARY GARDEN. A FILM FEATURE WITH THE CITY MAYOR OF PALERMO, SICILY:

The lecture was given by Martin Burr, Fachwerk für Bau, Bühne, Bild und Biennale from Allschwil (CH).

A world moved by invisible networks, transnational private interests, algorithmic intelligence and ever-increasing inequalities through the unique lens of Palermo – a crossroads of three continents in the heart of the Mediterranean. Throughout history, the City of Palermo has been a laboratory for diversity and cross pollination, shaped by continuous migration. In the 1875 painting by Francesco Lojacono, «View of Palermo», nothing was indigenous. Olive trees came from Asia, aspen from the Middle East and eucalyptus from Australia. Citrus trees – the symbol of Sicily – were introduced under Arab sovereignty. The botanical garden of Palermo was founded in 1789 as a laboratory to nurture, test, mix and gather diverse species. The idea of the «garden», exploring its capacity to aggregate difference and to compose life out of movement and migration. Gardens allow for cross-pollination based on encounter. In 1997, French Botanist Gilles Clément described the world as a «planetary garden» with humanity in charge of being its gardener. Twenty years later, the metaphor of the «garden» is not as a space for humans to take control, but rather a site where «gardeners» recognise their dependency on other species, and respond to climate, time, or an array of social factors, in a shared responsibility.

This film features Leoluca Orlando as gardener of Palermo. Being native to the universe, he connects mobility in thought and physics to digital competences. The film cites an index of Orlando beings, partly becoming alive in the publication «A QUANTUM CITY», which Martin Burr handed to the mayor of Palermo for this occasion. So the film features how to become a city and gardener in this and that universe.

CANONICS

II16. THE PYTHAGOREAN LEGACY OF CANONICS:

By Elias Zafiris from University of Athens (GR). The lecture was about the Pythagorean legacy of Canonics from a theoretical perspective, as a means of metaphora from the harmonic to the geometric domain, aiming to bridge

communicatively together the acoustic to the visual.

First, he gave some important definitions and facts and then compare them with each other as following:

-*Canonic*s: transformation from the Ear to the Eye and inversely. The domain of the ear is the domain of harmonics (mathematically the domain of harmonic analysis).

-The domain of the eye is the domain of geometry comes altogether with the notion of *spectrum*.

-Every acoustic sound is decomposed into its harmonic constituents uniquely.

-Ear separates a compound tone into its pure-tone harmonics.

-We can hear a separate note any combination of individual notes played simultaneously- Harmonic Analysis.

-The eye does not have this ability! When two colours are mixed, we only see a single third colour.

Then he described the process: “I try to build a bridge in time starting from Pythagorean to the present. Cosmogonical context (Static Tripod: threefold stable communication relation embracing the obstacle)”.

Then he talked about the Delphic Static Tripod: it is not only the three legs that carry the statue ... this what makes everything connected together. It refers to a kind of communication between three different domains to achieve stability

Then he began with the most important part of the speech which is the conception of time (tripod of time): Clotho – Lachesis – Atropos, they are three ladies

-Clotho is winding the court

-Lachesis is digitalizing it

-Atropos which put boundaries and can even cut the court

Three folds contain all the whole concept of time.

Then he introduced the fact that summarises the beginning of the process (encoding/ decoding bridges) as a way of finding a solution for any problem.

: in mathematics we don't really solve problems rather we embrace problems. When You have a problem in the upper level. You can't go directly from the initial point to the final rather you need to make a scaffolding or to build a bridge in the both sides. By this one round trip, you have managed to embrace the obstacle. This process involves two levels that communicate to each other.

In the second part he talked about the harmony: We don't have subject and object in harmony. That's mean we lose the ideology, what means harmony. The role of Arithmos bridges is to go from harmony to geometr. Armonia (Hrmonics) choreography. Arthmos (logarithm - Algorithm) Scenography. Arachne (visual geometric Architectonic Weaving) Ichnography.

After he introduced that essential concepts, he gave an example from the nature: It was about how the spider makes the web is a combination of two spirals it expands through a logarithmic spiral but then it comes back not in the same way but through another kind of lines. that makes this net vey effective.

Then he talked about the Meander and Labyrinth:

Topologically each one of them has each orientability. Labyrinth has the same pattern that we see in the spider web. So, it is a combination of geometric spiral and Archimedean spiral.

Then he stated a definition and facts about the notion of *logos* which is the central unifying notion of Heraclitus fragments. Logos refers to the universal objective schema of Harmonic Communication of nature with us. The logos establishes and assigns to it always the Equivalence class of one True in binary Partition. The logos refers to the acoustic domain.

In the third part of the speech he introduced the term of Sibyl and its function:

-Sibyl articulates what is harmonically resonant in time within the boundaries of the signified by the oracle.

-Sibyl is not melodic, but she is harmonic. This is the aspect of time. The melodic comes from the arrangement, but harmonic comes from vertical dimension.

Then he introduced the theory of Standing waves and the Monochord: it is a type of wave which is not travelling in space. Space is fixed so you have two bridges and within these two bridges you have a chord. This chord can vibrate. In this kind of wave space doesn't play any role. That gives us the possibility to express the relationship between musicals intervals and rations.

In the end he applied the previous steps to define What bridges and scaffolding we use to extend the group structure of harmonics to the group structure of frequency ratios. As he answered: Ascending via the Geometric Progression and Descending back via the Arithmetic Progression.

Most important for me was the Polar grid notion. Because it can be used as a scaffolding to make the transformation from chord to optical. That makes us remember the early beginning of the lecture where Elias compared the ranges that each if eyes and ears can differentiate. So, we see the Spider's net not as an object but as a transformation between two different domains.

II17. SPECTRAL ARCHITECTONICS:

The lecture was given by Nikola Marinčić from ETH Zurich (CH).

This talk was about the art of learning, and how it can challenge today's attitude towards computation and machine intelligence. It investigates the question of computability through the notion of information while shifting from the traditional set-theoretic points of view towards the abstract mathematics of categories and models it makes possible.

In 1935, Alan Turing defined computable numbers as “real numbers whose expressions as a decimal are calculable by finite means.” By expanding on this distinction, he drew a line within a much larger context of what is computable and what is not. Today, amid the hypes of machine intelligence, we are getting used to a somewhat paradoxical ability of using computers to operate on that which theoretically cannot be computed. The price of this is to give up on understanding of why this is even possible. The argument that machine learning simply works (and that it works incredibly well) tends to replace the already crumbling question why, but also the curiosity of what (it is) and how it can be domesticated within our legacies and integrated into our existing knowledge. The indisputable master ship of contemporary engineering radiates with confidence that learning what is essentially the role of mathematics could be replaced with engagement.

II18. IS COMPUTING AN INFERIOR WAY OF THINKING? (ON CHURCH-TURING THESIS):

The lecture was given by Gilles Dowek from École normale supérieure Paris-Saclay (FR).

Computing is often viewed as a inferior way of thinking, unable to take context, reflexivity, emotions, ethic... into account. This view, however, raises philosophical and scientific issues, that was discussed in this talk.