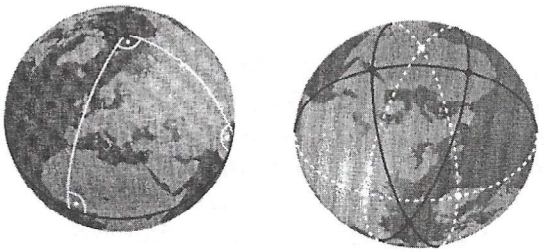
Martin Uhrík

READING THE BOOK „THE FOLD, LEIBNIZ AND THE BAROQUE" BY GILLES DELEUZE

Non-cartesian architecture

In the works of some contemporary architects, we can find a trend to escape out of classical definition of the space. In the traditional architectural theory is space defined as a form of the inner volume of any building. Understanding of the space is static. We can explain this space as transparent mass completely filling the inner space of a building. Contrary to the traditional definition of the space, architect as Peter Eisenman, Ben van Berkel & Caroline Boss, Greg Linn and many others try to develop new concept and different role for space in the architecture. For this new approach to architecture arise name "Non-cartesian architecture". What are the basic differences between classical and new approach? At firs, it is problematization of the Euclidean space. Wide accepted opinion is that the Euclidian space is the real absolute space of our world. This opinion is supported by our senses. Natural and intuitive perception of the space really shows that construction of space as a plane is the most natural understanding of the space for human beings. But our senses are wrong. The well-known Fifth Euclidian postulate climes: "Two parallels have equal distance between themselves everywhere."[1], this reinterpretation of the Fifth postulate is known as "postulate of equal distance". At the beginning of 19th century mathematicians tried to prove this postulate, but the proofs showed that it isn't possible to solve this problem. Mathematicians like Gauss, Lobatchevski and Rieman made the next step. They all found new geometries, which were different from the Euclidian geometry and in their geometries the Fifth postulate was untrue. For instance "spherical geometry", which is the most suited geometry to describe Earth's surface, because of spherical shape of the Earth, ignore the Fifth postulate. Parallels on spherical surface don't exist. Any of two straight lines bound to a spherical surface have two points of intersection. **/figure 1/**

Discovery of different geometries, which don't eliminate one another, brings revaluing of **Figure 1.**



human attitude to space. Different geometries represent different ways of the study of shape's structures. Understanding of the space as a structure brings new freedom to work with the space. The next step forward was the appearance of Topology a science that describes bodies by wider characteristics than only geometric. Greg Linn in the lecture "Geometry in Time" describes topological geometry as a system, which brings the concept of time and flows to architecture. By this approach it is important to redefine the concept of architecture from static to dynamic system.[2] In this point, we are getting closer to the definition of the Non-cartesian architecture, through new discoveries in mathematics and geometry.

This paper will deal with the second approach to the topic of Non-cartesian Architecture – philosophy. Cartesians have strong influence on the concept of space. Rene Descartes, a great mathematician and philosopher brought braking ideas to geometric concept of space, as well as to the philosophy of bodies and space. The definition of space by Descartes is: "...if we remove all sensual illusions remains: Extendibility to the length, to the width and to the depth, creates the space and it is the same as that which is creating the body."[3] Here we can find the tree axes known as Cartesian system, but probably more important is the identity of the space and a

[1] Devlin, Keith: Jazyk matematiky. Nakladatelství Agro a Dokořán, Praha 2002, p. 162

[2] Kol.: Architektura na prahu informačního věku. Zlatý řez, Praha 2001. In: Lynn, Greg: Geometrie v čase. p. 81-98

[3] Descartes, René: Princípy filozofie. Nakladateľstvo Pravda, Bratislava 1987 p. 87

body. This established base of understanding the architectural space as a conglomerate of static bodies.
Contrary to the static historic concept of the space, contemporary architecture is looking for a dynamic definition of the space and architecture. The new concept should bring closer connection of architectural and social spaces. Today, architects try to bring dynamic flows to design because better describe they the processes in the world. The most important requirement is connection of the space and the time. This process moves out of durable borders of the space to the transformation of the time into the bodies. Theoretician and architect Ignasi de Solá-Morales defines Non-cartesian Architecture by different words: "Liquid Architecture will change rigidity to fluidity, as the space will not primary be accented but the time"[4] Focusing on dynamism brings a new problem the infinity. Time, flow, movement and complex vector attributes are new words in vocabulary of contemporary architecture. All these concepts connect the relation to infinity. It is beyond the topic of this paper to explain the exact connection among infinity and those concepts therefore, we will focus on the connection of the space and infinity. In the text mentioned above, Descartes' approach to the space was explained. In the same time another great philosopher Gottfried Wilhelm Leibniz developed his own concept of the space and the world, which count with infinity. In this point we start to discuss the main topic of this paper – the book "The Fold Leibniz and the Baroque".

The Fold Leibniz and the Baroque

Deleuze wrote this tiny book neither as a typical wide scale research of Baroque nor as a comprehensive study of work of Gottfried Wilhelm Leibniz, but as paraphrase of Baroque through specific figure of the Fold. The Fold is for Deleuze a mediator of many figures and statements in history of art, science, costume design, mathematics, lyrics, and philosophy. The approach is typical Deleuzian, it is much more reinterpretation than sophisticated research. Deleuze often identified himself with philosophers of the past. He wrote books about Nietche, Spinoza and Bergson. To extend and modify the standard of philosophical writing, he wrote on Kafka, Melville, and later, Francis Bacon. Leibniz has powerful influence in all Deleuze writings. It is not surprising that The Fold was written as one of the last books of Gilles Deleuze.
We didn't mention reasons why Leibniz. Leibniz is considered for such a contemporary philosopher that many of modern philosophers but, also architects and artists mentioned him in their writings. Interest of architects is common for both Leibniz and Deleuze. Leibniz's research on science and mathematics or his treatments of belief, music and theology, help to explain what we know about the world at the beginning of twenty-first century. Leibniz is the first great philosopher and mathematician of the pleat, of curves and twisting surfaces. He rethinks the problem of point of view in perspective and phenomenon of the event. Probably most important part of his work is the problem of infinity. He, as a superior mathematician, discovered infinite calculus. Infinity and everything jointed to it becomes a leading moment in the work of Leibniz as a philosopher. Opposite to Cartesian ideal form, he invents his own strategies for mechanics: multiplicity, infinite series, textures, different orders of space and surface are concepts of his approach. Generally, Leibniz established basics of an extraordinary philosophical system. His strategies of use of the organic and inorganic worlds define his work, as Tom Conley noted in the foreword to The Fold, "Philosopher of habitat and ecology"[5]. Deleuze found Leibniz a unique philosopher, who wasn't appreciated enough in the history of philosophy from Gothic period until now. He implies that Leibniz is not only a chapter in mathematics, cognition and logic, but also a great personality in philosophy. The relation of monadic thinking to our senses and to world has strong connection to contemporary researches in theory of science, music, art and architecture. The Leibniz solved the ontological problem of the world through multiplicity of monads. Invention of The Monad as the basic nonmaterial substance create strong platform for contemporary

[4] Kol.: Architektura na prahu informačního věku. Zlatý řez, Praha 2001. In: Solá-Morales Ignasi, Geometrie v čase . p. 61-74

Deleuze, Gilles: The Fold Leibniz and the Baroque. University of Minnesota Press, Minnesota 1993, p. xiii

thinkers. Deleuze is adding new layer to Leibniz's ideas. It is the Fold. Folding and unfolding Leibniz's ideas, Deleuze created new point of view on Baroque and through Baroque perspective on contemporary world. Here comes the question: Why is connection to the baroque for Deleuze important. At first Leibniz was born in 1646 and died in 1716 between the years 1667 and 1690 the Santa Sindone in Torino by Guarino Guarini was built. It is probably an architecture with the clearest baroque concept. Virtualization of experience inside the church was created using imaginative surfaces, which are folding one through the other. During the time of Leibniz's life Baroque became an artistic style that affected all Europe and the world. It brought new concept to architecture - designing the building through designing the inner space. Space in baroque, opposite to medieval architecture, became spreading to infinity. This crossing of infinity in architecture, art, in mathematical infinite calculus, and finally, in infinite philosophy of Gottfried Wilhelm Leibniz, was a leading idea of Deleuze when writing the book about Baroque.

Another very influential story of the 17th century was born of new, we can preferably say contemporary science. Isaac Newton belonged to the personalities of that time, who had correspondence with Leibniz. They had controversy in some mathematical questions. The origin of tension was the infinite calculus. It is not clear until now who, of these two mathematicians discovered it earlier. The truth probably lies somewhere in-between. Leibniz and Newton made their invention probably at the same time independently and the misunderstanding was connected to the date of publishing their works. Another personality was Rene Descartes great mathematician and philosopher. His invention in the field of analytical geometry and methods used gave the strong impulse for constitution of new science. The challenges for those mathematicians were to find the description of the world and The God via mechanics. This approach requires strong philosophical background. It means that each of here mentioned mathematicians had to be a philosopher. They needed to create their own vocabulary, which was due to the basic questions, much more philosophical than mathematical. The most important question in the Rationalist movement was the definition of substances, the smallest parts from which the world is compound. Descartes distinguishes two substances: RES EXTENSA – a corporeal object, which doesn't have its own mind but it has attribute of extendibility and RES COGITAS a non-extendible spiritual substance with attribute of thinking. Leibniz criticised this dualistic approach, the split of body and mind doesn't explain unity of a thing. His concept uses unity of mind and body in substances, which he calls monads. Monadology is the basic work of Gottfried Wilhelm Leibniz.

Deleuze is mediating the concept of the monad to the contemporary language and to the problems of our times. Continuing in the line of work did before The Fold and in more recent work that follows The Fold, Deleuze with his co-writer Félix Guattari, developed a new direction in philosophy "geophilosophy". Leading process is deterritorialization. The authors do mean that philosophy can advocate the collapse of national boundaries. The process should lead to return of natural diversities in economy and ethnic worlds. The main tool is monadic sensibility, which is connecting any ideas to concepts of habitat and thinking. The question where the Monadology is changing to Nomadology is living in the world in questions of space and time, the difference of inside and outside and of public and private. Monad is compressing the time and the space to infinity, this process shifting opposition of organic and inorganic matter into tonal flow and flux. This research is the main topic of the book The Fold.

In the last sentences we can read lot of questions common for contemporary architecture and philosophy. Reading this book should bring different approach how to deal with the problem of space in architecture. Language of Deleuze's writing is using metaphors connected to space - time dimension. Here we can find the point why Deleuze is so often noted in the works of contemporary architects. He rethinks the problems of inside and outside and lot more categories of space in a different way and this gave him a unique place among thinkers of the present.

The analyzes of "The Fold" will follow program of unfolding architectural meaning of Deleuze's ideas. Thus I choose three basic parts that are strongly connected to the

problem of space. The first will be the problem of the fold, which defines the new concept of perception of the world. Deleuze is talking about "The Pleats of Matter" and "The Fold in the Soul". The fold is a frame for next part of my work. I will try to explain inside, outside, exteriority and interiority as a different concept of the space. In this part we will discuss new, better different, tools to handle qualities of space. One of the leading ideas, in this part of writing is a problem of the event. The last part, the conclusion, will explain problem of "Having a Body". The headline guided us into questions of real world. New concept of space must mirror in our senses, thus Deleuze resolves problems of actualisation of the idea and realisation in the world. The conclusion will include the asset of the theory to architecture. But before we start, it is important to put the definition of the Monad, because this Leibniz's invention will accompany us through this paper. So what is the Monad and how does Deleuze rethink it? Monads, as described by Leibniz in the Monadology, are simple and individual substances that are parts of a compound. Monads constitute real atoms of nature, elements of things that start the creation. They are all different from one another, just like in nature; there aren't two beings that are exactly alike. Monads have no extensions, no parts, they have no windows, and nothing can come in or go out. So the question is how can monads interact the world? Monads do change their internal principles, not the external ones. The principle of change will always be understood in certain multiplicity within their unity, within their simplicity and elementary being. Monads comprehend and represent their multiplicity trough the "perception" that they have of the world. Perception cannot be explained with bodies and with movements since bodies and movements are a composite of accumulation of "simples". Perception can only be found in simple substances and within their changes, within their internal actions. It is because of their internal actions that Monads are self sufficient, and therefore are the creators of their own activity: "appetition" is the passage, the activity from one perception to the other. A Monad´s present is the natural and evolving result of its past, of a preceding condition, and its future is a natural evolution of the present. Monads recollect and identify their perceptions even if the perceptions of the past are not "apperceived" until they are in the present. "Conditio-sine-qua-non" of a Monad is therefore to have distinct and valuable perceptions. Without perceptions Monads would loose consciousness and meaning. They would be in a constant state of "swoon" as Leibniz defines it. Monads have been gifted by nature with distinct organs or "organic bodies" to collect perceptions (touch, smell, taste,...) and what occurs in the soul represents what occurs in the sense organs. What enables consistency is memory that also allows the soul the succession of perceptions. The answer how the monads interact the world is through its perception and the act over the world is taken by body, which Leibniz described in Monadology as follows. Every Monad has a body and a soul, both expressing the universe. The soul changes its body in small steps. There can never be a soul without a body only God is bodiless. Bodies gathered in the composite substance, in the accumulation of simple atoms, are affected by their contact with each other and are therefore able to feel everything that happens to one another. The result is a communication that goes beyond distances. Every body has therefore the power to experience anything that happens in the world. The body is the "location" of all my basic perceptions. "I must have a body, it's a moral necessity, a "requirement". ... I must have a body because an obscure object lives in me."[6] The body is considered here to be a zone of expression and perception. The Monad expresses the world, it is the mirror of the universe according to "its body," according to the organs of the body, and according to the activity, the energy, the forces of other bodies on itself. The body realizes the world and the world realizes the body: "... realize is not to say that they are real: they become real with respect to what is actual in the soul. Something completes or realizes it in the body".[7] What is within our bodies, our organs, our mind, our flesh, is action. Monads are the state of one, the unity that envelopes multiplicity. The body/mind, the Res Extensa/Cogitans the actual material reality is

[6] Deleuze, Gilles: The Fold Leibniz and the Baroque. University of Minnesota Press, Minnesota 1993, p. 85

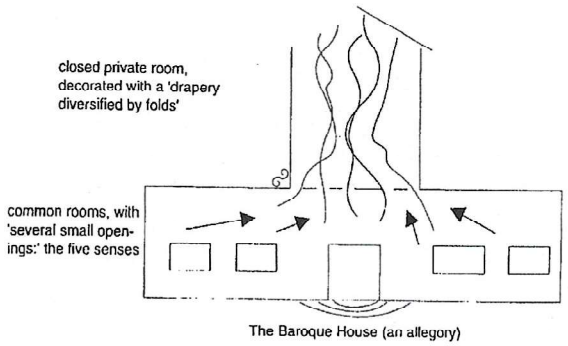
[7] Ibid: p. 120

able does action to make realizations in the space. The Monad is realized in the space. The Monad produces a space of its own and this space is defined by "fold" and its ability to unfold and refold." Thus when an organism is called to unfold its own parts, its animal or sensitive soul is opened onto an entire theater in which it perceives or feels according to its unity, independently of its organism, yet inseparable from it."[8] The folding-unfolding movement creates a growth, an envelopment and development. Development is ability of motion. Development in a Monad is under the action of exterior surrounding and the influence of interior forces that give the right direction. As Gilles Deleuze states in The Fold, knowledge and ideas reside only where there is a "fold", and sometimes everything is so wrapped up in the folds that we can't "unfold", certain things are just naturally wrapped up in nature and can not be set free. Unfolding is action toward development, to unfold means to perceive. The Monad unfolds between two folds and therefore within the folds it perceives.

Here, in the text, we can see how Deleuzeian Fold attacks Monad discovered by Leibniz. Deleuze uses qualities of Leibniz's substantial forms and rethinks it further. It is very important to understand the Monad and its qualities, unity of body and mind, possibility to interact with the world and processes of the perception. Deleuze will use above-mentioned inventions as the support structures for developing new ideas beyond them.

The Pleats of Matter and the Folds in the Soul

In this part we will get closer look to the Fold. It is a basic element of Deluzian philosophy. Generally we understand under the name the fold a wide scale of shapes, which have some identical qualities. Clear definition of the fold doesn't exist. The first impression of characterization the fold is curvature and in a geometrical way it is a surface. Thus the simple definition read: The fold is any curved surface. Our definition is strictly geometrical. The Deleuze's conception of the fold is very different. He inspires to use this name from ordinary understanding of the word "fold". To understand Deleuze's characteristics we must to move from the simple name of shape to a metaphorical language of philosophical system. The Fold has its own structure. It describes constitution of the matter and it has its own metaphysical system. The Fold is complex system through which, is Deleuze able to describe the word. He presents ability of The Fold on the Baroque and Leibnizian philosophy. The fundamental characteristic of the Baroque by Deleuze is absence of an essence. "Baroque is rather as an essence the operative function or trait".[9] It doesn't invent new things, but the essence of the Baroque is endless production of the folds. Baroque reuses folds that come from Gothic, Roman, Greece, East... It twist and refolds its folds, stacks it one over the other and pushing it to the infinity. This is the short feeling what The Fold is, it clearly shows that we don't talk about the shape but more about the system, but it doesn't mean that the shape is not The Fold. Concept of The Fold is multidimensional, it spreads from the material forms and the shapes to the conceptual models and the systems. For Deleuze is typical an assemblage of all meanings of The Fold in one part of text, thus we must distinguish the metaphorical and technical approaches of the paper. This approach is easy readable in definition of basic structure of The Fold in Baroque. "..., the Baroque differentiates its folds in two ways, by moving along two infinities, as if infinity was composed of two stages or floors: The pleats of matter, and the folds in the soul."[10] Deleuze puts an allegory of the Baroque House with two floors. /**Figure 2**/



The Baroque House (an allegory)

The upper floor is place of the folds in the soul and the lower floor inhabits pleats of matter. This is the basic vertical division of the Baroque world into the matter and the soul. We must keep in mind that both the soul and

[8] Ibid: p. 11

[9] Deleuze, Gilles: The Fold Leibniz and the Baroque. University of Minnesota Press, Minnesota 1993, p. 3

[10] Ibid: p. 3

matter are folds, which are creating multiplicity of the folds inside the labyrinths. The multiple is not only what has many parts but also what is folded in many ways. Deleuze characterized the relation between two labyrinths by Leibniz's words: "A labyrinth corresponds exactly to each level: the continuous labyrinth in matter and its parts, the labyrinth of freedom in the soul and its predicates."[11] The two parallel labyrinths, the lower one with openings the allegory of the five senses and the upper closed diversified by folds. Question is how they communicate together? New fold appears between the pleats of matter and the folds in the soul. This dualistic concept can be understood in the process of design. The matter which is opened to outside influences and the place where the materiality occurs is the realization of a design process and the soul where ideas occur and the actualization is the event are operations that describe processes of creation and perception. It gives the feeling what can be inspirations for an artist and an architect in the book The Fold.

The Pleats of the Matter.

The matter is literary the esence of architectural design. Any architectural approach must resolve question of the matter, because it incorporate the problems of the space, the bodies and the solids. The concept of the matter in Deleuze's reading of Leibniz is inspiring for contemporary architects. The name Liquid Architecture, which was explained by Solá-Morales[12] is directly influenced by The Fold. Leibniz's concept of the curvature universe is defined by the curvilinearity, the fluidity of matter, the elasticity of the bodies, and motivating spirit as initial mechanism. In contemporary non-cartesian architectural movement Leibniz's curvilinearity will be explained as geometry of the NURBS[13] surfaces, the fluidity of matter as the flux, and elasticity of the bodyes as liquid architecture. These are topological transformation of a matter used by Leibniz to describe the universe as well as operations used by architect to create new design. The theory of architecture has just started to develop the vocabulary as well as basic system for designing the Liquid Architecture. As Deleuze shows, Leibniz developed vital system for describing dynamic changes in the univers and therefore we can redefine it into theoretical basement for Liquid Architecture. What is the matter? The first important attribute is an endless divisibility, but it should be kept in mind that we are still talking about folds. The fold cannot be divided to the particles as the atoms do. By the dividing pleats of matter we are producing new forces, which act among themselves. Through the system of the forces is Leibniz, contrary to atomic principle of the absolut fluidity preferred by Descartes, able to fulfill the requirement of the continuity. The best illustration what the continuity brings to the understanding of the matter is citation from The Fold "Matter thus offers an infinitely porous, spongy, or cavernous texture without emptiness, caverns endlessly contained in other caverns: no matter how small, each body contains a world pierced with irregular passages, surrounded and penetrated by an increasingly vaporous fluid, the totality of the universe resembling a pond of matter in which there exist different flows and waves."[14] The question appears how is it useful for architecture. We must remember that contemporary definition of the space is very close to the body and bodies are made of the matter. The space is esence of the architectural design and theory of our times. If we push the concept of the space out of rigid bodyes to the elastic bodies the time-space dimension can be added to the space and therefore to the architecture. The time-space dimension brings dynamism to architecture This better correspond with contemporary social environment and in this way can architecture more efficiently respond to new challenges. Leibniz explains a flexible or elastic body as a compound of the coherent parts that form the fold. The body is not separated into parts of parts, but is rather divided into infinity to smaller and smaller

[11] Deleuze, Gilles: The Fold Leibniz and the Baroque. University of Minnesota Press, Minnesota 1993, p. 3

[12] Kol.: Architektura na prahu informačního věku. Zlatý řez, Praha 2001. In: Solá-Morales Ignasi, Geometrie v čase p. 64

[13] Nonuniform Rational B-Splines – a mathematical model of surface that is defined by two vectors u,v contrary to Cartesian surface defined by tree coordinates x,y,z.

[14] Deleuze, Gilles: The Fold Leibniz and the Baroque. University of Minnesota Press, Minnesota 1993, p. 4

folds that are always hold together by cohesion. The fold is always folded within the fold. What is the smallest part of the folds' division? Deleuze answers:" The unity of matter, the smallest element of the labyrint, is the fold, not the point which is never a part, but simple extremity of the line."[15] The definition moves the idea of the matter out of materiality and inclines to the pure mathematical formula. This is a radically different formulation of the substance, as we know from Descartes. Deleuze interprets Leibniz's mathematical approach in philosophy and his invention of the monad. The system converts particles into folds, which can represent the folds of the wind, of the water, of the fire and the earth. It is the system of complex interactions that are created due nonmaterial principes of geometry. Greg Linn notes that the future of architecture lies in analysis of the complex interactions among dynamic parts of our world. The fluxes, trajectories and other dynamic systems can by resolved by infinite calculus, the mathematical method, which was discovered by Leibniz.

The fold divided the space into inside and outside, but because of fold's continuity, it isn't possible to distinguish absolute interiority and exteriority of the surface. The folded drapery on the table creates folds and we can determine inside and outside within the drapery, but refolding of the textile will change quality of inside and outside of the folds. The continuum of the drapery explains, the above mentioned, the fold that is folded within the fold. The pleat of textile incorporate many others pleats which are creating complex drapery. Continuum of the surface explains inability to distinguish absolut exterior and interior of the surface. The fluidity of the surface (the matter) enables a continuous flow between two extremities the inside and the outside. This conception brings new strategies for better describing the architectural space. Since classical definitions always deal with substantial attributes of the space, Deleuze builds a totally different system. It doesn't have problem to define outside and inside of the space. Contrary to standard definition, where inside space must cross the borders to become outside space, continuity resolves the problem by dealing with inside and outside like two opposites of one structure. For the same reason the question what the border can be is hazy and unclear for both the theoreticians and architects. Deleuze doesn't stop at the description what the fold is, but he continues and offers us the tools for operating on the fold. Processes that act on the fold are folding and unfolding. Unfolding is not the opposite to folding. It follows folding up or simplifying the fold. What do mean these processes to the real world? Before we put Deleuze's definition it is important to know what are the organisms and mechanisms in Deleuze's philosophy. They both are the machines, this is the one of basic categories in Deleuzeian philosophy. The mechanism is composite of parts which are not the machines itself, while the organisms consist of the machines which are infinitely dividable to the machines. Come back to the actions of the folds. Deleuze wrote: „Folding - unfolding no longer simply means tension - release, contradiction - dilatation, but enveloping - developing, involution - evolution."[16] The organism is defined by its ability to fold its own parts and to unfold them, not to infinity, but to the degree of development, which is particular to its spice. The unfolding means to increase, to grow and folding indicate to reduce.[17] Deleuze answers the problem of the environment by integrating it to the system of folds. The fold flows continually through the matter and it is dividing to smaller parts – point-folds, over the problems of inside and outside, up to the definitions of mechanisms and organisms and further more to explain the processes of folding – unfolding. We can continue in a more precise analysis of the book and penetrate deeper to the structure of Deleuze's concept of matter, but it beyond the scope of this paper. What is important to say; purpose of this part was to explain nature of the matter. But the fold doesn't fold only matter. We mustn't forget the problem of the soul, which will be connected to thinking and thus to conceptual part of architectural work. It is not a surprise that the folds in the soul are explained on the background of mathematical

[15]Ibid: p. 5

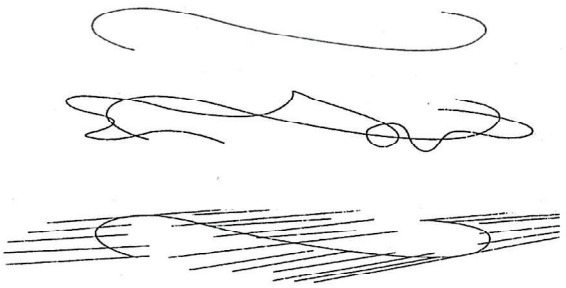
[16]Deleuze, Gilles: Foucault, Hermann&Synové, Praha 1996, p. 8

[17] The mechanism and organism are acting on and affected by maschinistic forces, which are based on abstract and concreat machines that Deleuze analyzes in the book "Foucault".

knowledge. They are two serious arguments for using the mathematics. The first one is that mathematics and its disciplines are pure science. The connection to the word of matter is indirect if any. This feature correlates to Deleuze's understanding of the folds in the soul as something nonmaterial that goes on the field of the soul. The second argument was already mentioned here, it is definition of the point-fold as a"simple extremity of the line". The nature of the matter is a nonmaterial mathematical function.

The language of the chapter use exact vocabulary like point, curve, vector, etc. We couldn't leave out the parallel with architecture and especially with the proces of designing. The virtuality of the architectural concept, the analysis, and even the drawing use same vocabulary and conceptual approaches as Deleuze's mathematical definitions. The chapter starts with the definition of crucial event and not with characterization of the structure. "Inflection is the ideal genetic element of the variable curve or fold. Inflection is the authentic atom, the elastic point."[18] For the easier description of the problem Deleuze uses drawings of tree different curves made by Paul Klee. **/Figure 3/** The first figure draws the inflection. The second shows that doesn't exist clear and unmixed figures. The third explain point of inflection and its context to convexity. It poses uncertainty in orientation of a curve. We are not able to solve what or where is right – left, low – high, or maximum and minimum. "The inflection is pure Event of the line or of the point, the Virtual, ideality par excellence."[19] The only thing that determines the inflection are its vectors. Ben van Berkel and Caroline Bos in the project "Möbius House" use second drawing for diagram of coexistence of two bodies in one space of the house. The Event is another big theme in architectural thinking, Kaas Osterhuis or Solá-Morales regards it, the basic of the new architecture. And Greg Linn says that describing surfaces by vectors and not by points is crucial sign of non-cartesian architecture. Here we can see the wide range of inspirations in contemporary architecture. The dynamism included in the curve and inflection produce different understanding of the object and the subject. Leibniz posits the idea of families of curves depending upon one or several parameters. These parameters are fulfilled not by unique solution the one line, but result is family of curves. The new object we can call objectile. It doesn't refer to the exact law, as we understand object from classical philosophy rather to the current status of the things, it is the same principle of fluctuation as in the fold. The objectil no longer refers to the relation of form – matter, but to continuous variation of the matter as a continuous development of the form, therefore it is the event. For contemporary architecture, which uses animations software such a Maya, or 3D studio, to create series of dynamics variations of the design is objectil native part of thinking and design.

Figure 3.



We could continue and enlarge vocabulary for describing the Folds in the Soul but for this reason it would be beyond the scope of this paper. But still we will not know much about their connection to the architecture. Lets go back to the extraordinary baroque architect Guarino Guarini and his St. Sindone chapel. His interest doesn't stop at the architecture. Guarini studied theosophy, astronomy, physics, and mathematics. Design of the chapel St. Sindone inhabits all his interests or folds of his soul. The chapel preserves relict of the Holy Garment. Guarini's concept puts the accent on the model of baroque mysticism, which is based on lived and experienced aspects. He constructs the fold that includes the folds of his astronomical and mathematical researches **/figure 4/** and the theological fold connected to Christianity, to the last days of Jesus Christ, and Matthew's Gospel, and to the main object of the chapel the drapery of Holy Garment.

[18]Deleuze, Gilles: Foucault. Hermann&Synové, Praha 1996, p. 14

[19]Ibid: p. 14

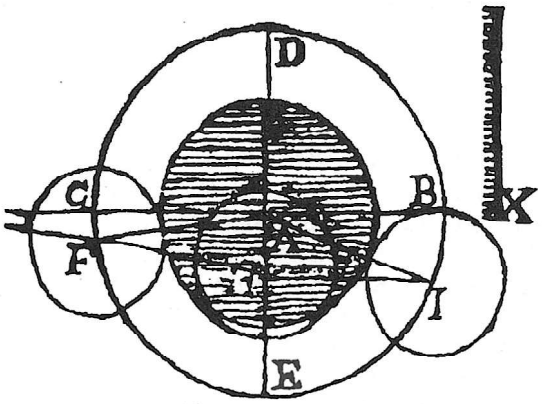


Figure 4.

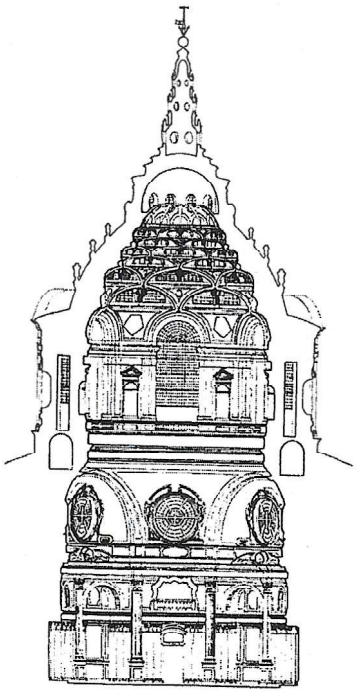


Figure 5.

The elements of Guarini's main fold are not stuck into hierarchical structure, but are folded one over the other and thus createing the objectile. The process of creation starts when Guarini unfolds the objectile constituting basic division of the chapel to tree folds. The inner space is the theosophical explanation of the death - lower fold, of the death's transformation to the life – the middle part, and turning the Earth to the heaven and vice versa – the upper fold. **/figure 5/** But we can find other explanation of the trinity in the chapel's space. The chapel folds are folding according the pleats of the Holy Garment or it should represent the Holy Trinity. All these are possible unfoldings of Guarini St. Sindone. Here are two possible trajectories of unfolding. One is Guarini's approach that we can follow by studying his drawings and writings, and this process constitutes the pleats of matter, the building of St. Sindone. Another unfolding is maid by historians, theoreticians or architects that are explaining the pleats of St. Sindone. The process of unfolding in the architecture represents design process, it starts with ideas that are unfolded to the research, then to the drawings and finally to the constructed building of the chapel. This is the proces flowing from the folds in the soul to the pleats of matters. But it is only one from many of possible unfoldings. The actualization and integration[20] can move in different directions. When we look today on the pleats of St. Sindone our actualization is unfolding it differently as the Guarini did. The compound of continuous folding and unfolding, different actualizations and integrations moving along the different trajectories doesn't create only material actualizations which we call the bulding, but dizpozitiv[21] known as the architecture of St. Sindone.

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[20] Actualization and integration are processes, which keep the abstract machine working. The abstract machine is Deleuzeian concept for diagram that is described as the map of relationships among the forces: the density and the intensity. The diagram is actualized and moving across partial integrations, which should finally produce the concrete machine – the dispositiv. For more: Deleuze Gilles, Foucault, Hermann&Synové, Praha 1996

[21] Dispositiv or concrete machine that is composed with lines of visibility, lines of statements, and lines of cracks and brakes. It is the composite of the features that make the any configurations visible and usable for the world.