того, в деяких країнах Європи ще тривало будівництво готичних соборів, і вони вважали готику своїм національним стилем. В Англії з 1750-х рр. неоготика стала важливим аргументом на користь національної самоідентифікації англійської культури. Феномен «готичного смаку» в 1740-і - 1780-і рр. з'явився в багатьох жанрах і видах мистецтва. Причина того, що на тлі класицизму проявився «готичний смак», полягала в постійній взаємодії бінарних опозицій у суперечливій культурі епохи Просвітництва.
Ключові слова: архітектура епохи класицизму, «готичний смак», мова метафор в архітектурі.

Davydich T.F. THE REASONS FOR THE STATEMENT OF «GOTHIC TASTE» IN THE PERIOD OF THE CLASSICISM COLLECTION. The article considers the reasons of spread of «Gothic taste» in the heyday of the architecture of classicism. With the support of modern sources it is shown, that the interest in Gothic reminiscences appeared in European architecture in the works of some Italian Renaissance architects, despite the fact, that the Renaissance basically rejected the Gothicism as a medieval «barbaric» style. The pseudo-Gothic was manifested in architecture before the era of Romanticism as a completely natural phenomenon of the the Enlightenment culture. Its origins were still exist in the aesthetics of baroque and even Mannerism. Further, the «Gothic taste» manifested itself in the theatrical culture of the baroque and the sentimentalism of rococo. In addition, in some countries the construction of Gothic cathedrals was yet continued. And they considered Gothic to be their national style: in England from the 1750-s. the Neo-Gothic became an important argument in favor of national self-identification of English culture. The phenomenon of «Gothic taste» appeared in many genres and types of art in the 1740-s – 1780-s. The reason for the «gothic taste» to appear on the background of classicism lied in the constant interaction of binary oppositions in the contradictory culture of the Enlightenment. In the XVII century in France, the Netherlands, Spain Gothic had continued and remained quite modern. This was under the influence of the Jesuits Order. In addition, in Gothic already began to see not only a powerful imaginative beginning, but also the engineering and constructive perfection. In the 1770-s. in all countries of Europe there was a close dialogue of Gothic reminiscences with classicism. The games with various signs was designed for direct, sensual cognition. In the era of the Enlightenment the binary oppositions of culture were constantly interacting - there was a disputation of the «elegant» (classical) and «barbarian» (Gothic) tastes. «Gothic taste» was also associated with a growing popularity of Freemasonry in the XVIII century. In the era of the Enlightenment the confrontation between Gothic style and Roman classics, which existed during the Renaissance, was already sufficiently firmly forgotten. The «Gothic taste» fully corresponded to the value system of the Enlightenment culture and was by no means a «romantic guest», an accidental phenomenon.
Key words: the architecture of classicism epoch, the «gothic relish», the metaphorical language in architecture.

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CRISES AND DISASTERS IN FUNCTIONING OF A CITY AS AN OPEN DYNAMIC SYSTEM

In the modern scholarly tradition, global crises are regarded as a phenomenon that prevents cities from achieving sustainability. Such an approach is justified in certain aspects of the issue consideration but it is not always right. A crisis is one of the possible states of any dynamic system with the potential for development. Crises can have their own dynamics of development: aggravation, decay and stabilization. When a crisis is defused, the system returns to a state of sustainability. When it is stabilized, the system starts adapting to a permanent deficit. And in case a crisis begins to deepen, there is a threat that it can get into a pre-catastrophic state, and then turn into a disaster. Many scientists exclude disasters from the relation “crisis - sustainability”, thus depriving studies of the main element, i.e. time which is allowed to make and implement certain decisions to stabilize the situation. At the present stage of general development of knowledge and technology, architecture

can mitigate the effects of most crises and become a reliable buffer between people and aggravating global problems. This research paper aims at analyzing the role of disasters in the development of architecture.
Key words: city, architecture, catastrophe, crisis, system, sustainability.

Introduction. In the modern scholarly tradition, global crises are regarded as a phenomenon that prevents cities from achieving sustainability. Such an approach is justified in certain aspects of the issue consideration but it is not always right. A crisis is one of the possible states of any dynamic system with the potential for development. It should be taken into account that any dynamic system inevitably reaches the growth limits in the process of development and begins to experience the periods of massive resource deficits, which, in fact, cause crises. Crises can have their own dynamics of development: aggravation, decay and stabilization. When a crisis is defused, the system returns to a state of sustainability. When it is stabilized, the system starts adapting to a permanent deficit. And in case a crisis begins to deepen, there is a threat that it can get into a pre-catastrophic state, and then turn into a disaster.

Many scientists exclude disasters from the relation "crisis - sustainability", thus depriving studies of the main element, i.e. time which is allowed to make and implement certain decisions to stabilize the situation.

We studied the scientific works on the problem of global crises written by the following authors: K. K. Kolin [1], V. A. Mau [2], V. Arhipov [3], B. Porfir'ev [4], Yu.V. Shishkov [5], D. Rodrik [6], S. N. Rodin [7], A. P. Nazaretyan [8], G. S. Molokanov [9], V. E. Penkov [10], V. I. Arnold [11], V. P. Berkut [12], A. D. Ursul [13], and N. N. Moiseev [14]. In many works that we considered, a disaster is not regarded as a possible outcome of a crisis experienced by the city's systems or civilization.

At the present stage of general development of knowledge and technology, architecture can mitigate the effects of most crises and become a reliable buffer between people and aggravating global problems. This research paper aims at analyzing the role of disasters in the development of architecture.

Research methods. Prognostics methods are used to study crises and disasters in the process of functioning and development of a city as an open, dynamically developing system. These methods allow you to get an idea about what vector of a city development as a system is more preferable and what measures should be taken for its successful transition through the bifurcation point. A mistake can result in emerging of empty cities and billions of dollars spent [15-18].

The postulates of a systems approach and synergetics are also used. It is synergetics that establishes interdisciplinary contact, being an effective tool for studying the functioning and development of a city with relation to crises and changes that take place in it [19-21].

Moreover, methods of system dynamics as a means of analyzing a city as a complex dynamically developing system are employed. Methods of system dynamics should be considered as an environment for studying complex systems that are subject to changes in the course of time. These methods allow you to take into account fundamental interrelation between system elements and fluctuations in the dynamics of its development [22].

Last but not least, elements of catastrophe theory, as a science dealing with the study of dynamic systems, are used. It greatly develops the notion about sustainability and inertia of a city and explains the essence and role of crises in its development as an open dynamic system. This theory is also an effective tool for studying abrupt, intermittent and sudden changes in the state of nonlinear dynamic systems during the transformation of their parameters [23-25].

Results. Vulnerability of a city as an open developing system is revealed in various critical situations that arise as a result of some changes in the environment, economic conditions, scientific and technological progress, etc. Identifying such critical limits and predicting the methods and consequences of overcoming them is the task of analysis and modeling of a city as a dynamic system.

The speed of cities' adaptation to the environmental changes is extremely low. At times, the mutations of the urban environment

can last for decades, sometimes even for centuries. As far back as the early 20th century, the rate of changes in the state of nature caused no concern. Today, a slow adaptation of the architectural environment to the ongoing changes represents one of the significant threats to the development of each historically established settlement.

In the context of numerous intersections of the great number of various interdependent factors in a single information-spatial field, the mechanisms for empirical choice of the ways of development get established. These are the algorithms of natural selection which, by the mode of their existence, cannot be set within a strict framework of a predetermined algorithm. We have come very close to understanding of the fact that civilization has accumulated enough experience and knowledge for predicting and selecting the preferable ways of development. Today, it is becoming extremely important for the mankind as a whole to have an idea of which way is more preferable and what measures should be taken for a successful transition to a new quality.

Consideration of the role of disasters in the city life inevitably leads to the following conclusions: disasters occasionally happen, almost all of them can be predicted, and most of them could have been prevented or would have caused not so heavy casualties. Confirmation of this thesis can be found not only in catastrophe theory. The Bible directly points to it as well. Pharaoh's dream about fat and gaunt cows [The Bible. The First Book of Moses. Genesis. Chapter 41.] is an example of the way correctly interpreted omens can help to avoid great upheavals.

However, a counter-argument follows from the statement of the principled predictability of catastrophes: "Why do many disasters occur suddenly?" The answer is simple: if some disaster has happened all of a sudden, it means that the methods of its prevention and detection are still imperfect. In this way, a thin branch and ice always crack under the weight of a body before breaking, a badly fitted wheel clunks loudly before causing an accident, and a handle of a plastic bag overfilled with food stretches before tearing. Catastrophes in complex dynamic systems are also predictable. In fact, any disaster that ever struck a city was always preceded by a crisis; however, a direct link between them is not always visible. Thus, for example, a social disaster of the Pruitt-Igoe residential area occurred due to a change in the U.S. legislation which aimed at easing racial tension in the country (see the details below).

As a rule, a disaster is preceded by either a single crisis, or by a complex of crises connected with each other. Every crisis has certain salient features which can be called indicators of crises. Groups of features, deterioration of which can lead to a disaster, can be named indicators of catastrophes. Therefore, the problem of disasters that can potentially happen in modern cities should be studied together with crises.

Many researchers consider global crises as a factor that does not allow modern cities to reach a certain ideal state. Cities, acquiring particular qualities, become capable of functioning safely for an unlimited period of time. The search for such qualities and development of methods of their achievement forms the basis for the academic research undertaken by many specialists around the world.

Global crises faced by contemporary society have given rise to a great number of scientific studies in practically all spheres of human knowledge. In architecture, the search for optimal solutions to the challenges facing civilization has taken on a really large scale, having demonstrated once again that architecture is not only a technical specialty, but also an art. The range of suggested solutions is so great that even its classification becomes a separate subject of research. Nowadays, there are four main directions of anti-crisis search distinguished in the specialty:

1. Technical direction. Within the framework of this direction, a number of measures are being developed the implementation of which should help to solve such problems as: fresh water deficit (for example, collection, storage and purification of rainwater), energy shortage, environmental pollution, biodiversity, social tension, etc. The voluntary certification systems, such as BREEAM, LEED, DGNB and others are becoming the most notable in this direction of the development of architecture.

2. Art direction. Within this direction, architects try to comprehend artistic prospects of technologies, which have been introduced in modern architecture, by means of plastic expressiveness of buildings. Vincent Callebaut, who has designed such projects as Hydrogenase, Physalia, Dragonfly, Lilypad and others, is considered to be the most famous master in this field. His works have made a powerful impression on many people who are interested in this direction.

3. Scientific direction. Within this direction, attempts are made to systematize the notion of global crises, assess their state, describe the prospects of the problem development, and give recommendations concerning its solution. The following concepts have become the most famous in this field: "Sustainable Development", "Smart City", "Vertical Farm", "Arcology" and others.

4. Mixed direction. In this direction, it is attempted to combine all the above mentioned approaches. Basically, many buildings that have got the highest marks in voluntary certification systems can serve as an example of the unification of science, technology and art. In terms of scale, the greatest attention is drawn to such projects as Solar Valley, Wuhan University, Tianjin Eco-City and a number of others which are oriented to the systematic application of architectural and constructional, energy and ecological innovations.

Thus, a well-defined dependency emerged in the innovative architecture: science – technology – art. It is noteworthy that these directions are already unthinkable without each other. Science determines the vectors of development, technology provides a material base, and art adapts the obtained results to the consumer's needs, creating visual comfort and forming his new world view.

Despite the obvious advantages of emerging approaches to the architectural environment of a new type, there are a number of shortcomings in each direction that need to be identified and eliminated. For example, in the technical direction, the lifespan of a building rarely corresponds to the estimated lifespan of innovations introduced into it, as it is claimed by manufacturers and dealers. There is a contradiction in this fact the meaning of which has not been ascertained yet.

So, the average lifespan of a solar collector and a solar battery is at least 25 years, a heat pump lasts for 15-25 years, the full service life of cogeneration units, on average, is about 120,000 hours (18-25 seasons), and wind generator serves for 10-30 years. According to the regulatory requirements, a building should remain in use for at least 50, or, preferably, 100 years. The difference in the lifespan of a building and innovations is 2-8 times. The innovations themselves become out of date after 10 years; therefore, a serious conflict between the building's construction and new technologies may arise in 30 years.

There has been a paradox of the consumers' perception of innovative architecture in the art direction of its development. The essence of the matter is conveyed in the fact that it is necessary to distinguish between the actual environmental sustainability of a building and the visual perception of it. In order to assess this problem, an express questionnaire was conducted. The respondents were asked to arrange 40 photos of buildings in descending order of their ecological qualities. Projects descriptions were not attached. In the set of buildings, there were 20 projects evaluated as "platinum" in the LEED system (Golisano Institute for Sustainability, Discovery HQ Takes Rare, Darla Moore School of Business, Vento Residences, Chartwell School, The Water + Life Museums and Campus and 14 similar constructions). The rest of the projects used, to some extent, greening of facades and roofs (The Vertical Forest, Singapore ParkRoyal, One Central Park, Musée du quai Branly and others). The result was predictable: 78 out of 84 interviewed people arranged pictures starting from the greenest buildings.

In the scientific direction, much attention is currently being devoted to the architecture of sustainable development. In this aspect of considering the issue, crises are viewed as a natural antipode of sustainability which prevents cities from reaching a certain prosperous state. The indicated approach is logical and justified if the system is regarded as the static one in each specific period of time. However,

such way of dealing with the problem is similar to the aporia of Parmenides, Zeno's teacher, about the reason why Achilles cannot catch up with the tortoise. "Swift-footed Achilles will never catch up with a slow-moving tortoise if, at the beginning of the movement, the tortoise is ahead of Achilles. Supposing, Achilles can run ten times faster than the tortoise, and he is behind it at a distance of one thousand steps. By the time Achilles runs this distance, the tortoise will have crawled one hundred steps in the same direction. When Achilles covers those hundred steps, the tortoise will have crawled ten more steps, and so forth. This process will continue indefinitely. So, Achilles will never catch up with the tortoise" [26].

A city is an open dynamic system the life processes of which are interdependent and are constantly changing. The nature of such changes can range from an actual stop in development (stagnation) to destruction (catastrophe). If most of the city's processes are in the state of stagnation, then a city loses its immunity to changes in the external environment. It can be illustrated by the example of the city Sassi di Matera which has existed in Italy since Hellas. In the 1950s, the Italian government used force to relocate most of the Sassi population to the areas of a developing modern city for a natural reason: the city was able to maintain only a certain number of residents, and the standards of their living did not meet the contemporary ones [27].

A sustainable city can be characterized as a system functioning between moderate stagnation and moderate crises. Stagnation preserves the accumulated positive experience, and crises make all the non-viable elements of the system die out. Such a pastoral picture is hampered by a single factor, i.e. the ability of a crisis to get into a state that is close to being catastrophic, or, sometimes, even turn into a disaster.

Today, many researchers do not include the concept "catastrophe" in their models of sustainable development. We believe that the approach like this leads to a number of distortions in the perception of the problem, creating the illusion that the system of a city is capable of recovering on its own in practically all arising situations. History definitely disproves such approach.

The results of the study. According to the definition given by V. I. Dal, a catastrophe is an upheaval, a cataclysm; an important event which determines the fate or people's business; what is more, it is a fatal, calamitous incident [28]. Disasters and emergencies have always existed: earthquakes, floods, epidemics and other calamities have accompanied the humanity throughout the entire history of its development.

Modern civilization is the urban one. That is why, it seems reasonable to explore the issue of possible disasters related specifically to cities and the regions adjacent to them. Therefore, we should consider this problem from the perspective of possible changes in the state of the urban system from sustainability to crisis and catastrophe. In the context of addressing the city's problems, it is possible to single out the following types of disasters depending on their nature: ecological, social, and industrial ones.

Ecological disaster. Ecological disasters in their essence can be divided into natural and man-made.

Natural ecological disaster. Natural disasters usually involve natural phenomena and structural transformations caused by energy which is released by natural elements (earth, water, air, fire), namely earthquakes, volcanic eruption, landslide, collapses, avalanche, flood, tsunami, heavy showers, melting glaciers, mudflow, heavy snowfalls, cyclones, typhoons, tornadoes, and fires caused by lightning and volcanic eruption. There were a lot of natural catastrophes throughout the history of the planet which resulted in destruction of entire cities or architectural landmarks of international importance.

The Destruction of Pompeii. It dates from August 24, 79 AD. Pompeii was founded in the 6th century BC. The city of Herculaneum was situated nearby. Both of them were buried under volcanic ash from the "awakened" Vesuvius. The majority of the residents died. Only those survived who had left their homes at the very beginning of the eruption. They abandoned all their property and left,

thereby saving their own lives and the lives of the loved ones [29].

Lighthouse of Alexandria. It was destroyed almost to the ground by a severe earthquake in May 1100. In the Middle Ages, the remains of the Lighthouse podium were built into the Turkish Citadel of Qaitbay. Nowadays, it is turned into Egyptian military fort. That is why, it is impossible even for scientists and archaeologists to reach the remains of the lighthouse.

Indianola, Texas, United States. In 1875, a hurricane destroyed the town crashing buildings and killing hundreds of people. The residents tried to rebuild it, but after 11 years, a new tornado devastated Indianola and turned it into a ghost town.

Yingxiu, China, 2008. Out of 7000 people living in the town, only 2300 survived after a terrible earthquake. 80% of the town was destroyed, but it has been gradually rebuilt nowadays. Moreover, the special memorial has been erected there in honor of the victims.

Yungay, Peru, 1970. An earthquake on the coast of Peru caused a landslide that hit Yungai, the nearby town. Almost the entire population (25,000 people) was killed. It was decided to rebuild the new town of Yungay a few miles away from the disaster zone.

Man-made ecological disaster. Man-made ecological disasters occur as a result of inadequate human economic activity and threaten the existence of the region's biocenosis. Deserts can serve as the oldest example of such kind of catastrophes. According to several scholars, virtually, all deserts of the world emerged as a result of the anthropogenic influence. Researcher David Wright claims that even the Sahara appeared because ancient cattle-breeders in Africa overgrazed the livestock [30].

Chernobyl, USSR, April 26, 1986. After the Chernobyl disaster, all people from the area around Chernobyl and Pripyat were evacuated. Even today, the land in that place remains highly radioactive.

Los Angeles Aqueduct. Arid climate and proximity to the desert seriously hindered the development of Los Angeles. Under the guidance of an engineer and entrepreneur William Mulholland, in 1908-1913, the project of the 375-kilometer-long Los Angeles Aqueduct, which was designed to supply citizens with water from Owens Lake with an area of 300 km2, was implemented. By the late 1920's, the lake had been completely drained, which led to an ecological disaster in the Valley and resulted in the so-called "water wars" between the Los Angeles administration and the Valley residents.

Bhopal disaster. On December 3, 1984, about 42 tons of toxic methyl isocyanate fumes were released into the air at one of the plants in the Indian city of Bhopal. 3000 people died instantly. More 15,000 people passed away in subsequent years.

Accident at the chemical factory "Sandoz". On November 1, 1986, there was a fire at the storehouse of the chemical factory in Switzerland. During the fire extinguishing, 30 tons of toxic agrochemicals were discharged into the Rhine. As a result, millions of fish died, and drinking water was contaminated.

Industrial disaster. Unlike man-made ecological disasters, industrial disaster does not have serious consequences for the environment. It only causes people's death and brings about destruction. Such catastrophes are mainly caused by a human factor.

Amphitheatre in Fidenae. In 27 AD, a huge amphitheater, built by a freedman Atilius in Fidenae on the outskirts of Rome, collapsed. The entrepreneur had tried to save as much as possible both on materials and on the preliminary analysis of the soil on the construction site. The foundation sank under the weight of spectators who came to enjoy the fight of gladiators, and the giant structure fell down, unable to bear the load. That day, on June 12, 20,000 to 50,000 Romans were killed, according to various sources [31].

The St. Francis dam was located 40 miles (60 km) northwest of Los Angeles, close to the present day city of Santa Clarita. It was built between 1924 and 1926. At 11:57 p.m. on March 12, 1928, the dam collapsed. About 431 people died as a result of the flood.

Bayou Corne, United States, 2012. Due to the karst extracting in the salt mine, a sinkhole of 100 meters in width and 15 meters in depth appeared in the ground. Already after

one year, the depth increased to 230 meters. All residents of the town had to be evacuated. They received compensation from the company which dug the mine.

Social disaster. Social emergencies include such phenomena and processes of the public life as social and political conflicts, riots, terrorism, military conflicts, rampant criminality, corruption, epidemics and other incidents destabilizing the life of society, endangering the life and health of its members, and deteriorating their living conditions [32].

Total air raids during the World War II convincingly demonstrated the uncompromising nature of the means used by the parties to a conflict. Massive bombing of cities destroyed communications and factories, and led to the death of thousands of innocent people.

The fate of Pruitt–Igoe, a social housing project that lasted from 1954 till 1974 in St. Louis, Missouri, USA, can serve as a very instructive example of a social disaster. The complex consisted of 33 11-storey residential buildings. It aimed at solving the housing problem for young middle-class tenants.

Until 1954, St. Louis housing policy had been based on the principle of racial segregation. So, it was planned that the complex would consist of two parts: one for African Americans and one for white people. With the abolition of segregation at the legislative level, Pruitt–Igoe initially provided houses for mixed groups of residents. However, within two years, the majority of the white tenants moved to other places, and mainly poor African-American people continued living in the complex. Soon, Pruitt–Igoe was associated with poverty and crime.

In the mid - 1960s, the complex started to resemble ghetto, and not that cheerful place it used to be during the first years after being occupied. Later that year, mass non-payment of bills led to a communal tragedy, namely the sewerage system breakdown in one of the houses. In 1970, the city authorities called the complex a disaster area. Having found no money for repairing local infrastructure, they decided to start resettling the residents.

Discussion. Architectural science has accumulated enough knowledge to successfully solve problems facing modern cities. Understanding the nature of possible catastrophes sets the main parameter for an architect, i.e. time of decision making and implementing the created programs. Any disaster is essentially predictable. The ability to identify disaster indicators and predict their development is becoming one of the skills needed in the specialty to settle a number of specific issues related to the analysis and modeling of a city as a dynamic system that is potentially capable of overcoming emerging challenges. Studying crises as factors that determine future scenarios and formats of existence of architecture and people in the architectural environment enables scholars to create a new map of scientific views and research areas that will ensure the maximum "survivability" of a city. At the same time, it is important to develop methodologies that could clearly indicate what changes the city's system must undergo in the period of a crisis and after going through it.

Findings. Catastrophes do not happen all of a sudden. Virtually, all disasters are predictable, although, not all of them can be avoided. Yet, one can always try to mitigate their consequences and reduce the number of possible casualties. Even the wrath of God does not come suddenly. Sodom, Gomorrah, Admah and Zeboim were vanished from the face of the earth by fire from the heaven. But before that, the Lord told Abraham that Sodom would be destroyed. Abraham prayed for that sinful city, and the Lord promised him that he would not destroy it if there were at least ten righteous people there. Angels came to Lot also, but citizens did not recognize the omens and did not confess their sins. [The Bible. The Book Of Genesis. Chapter 19.] Just like before the Great Flood there had been omens, and the righteous Noah was able to survive, having built an ark [The Bible. The Book Of Genesis. Chapter 6:5-18.].

Every disaster and every crisis has its signs. Signs, grouped according to the nature of their manifestation, become indicators of catastrophes. In the aggregate of their dynamic processes, indicators point out the possibility and the proximity of disasters when approaching a certain critical limit. If a disaster has happened suddenly, then either the appropriate

monitoring of the situation was not carried out, or people do not have enough knowledge for its understanding yet.

Today, a human factor is a primary cause of catastrophic and pre-catastrophic situations. The issue of the human factor is fundamentally solvable, but it requires developing certain principles and methods of its solution. Social, industrial and ecological disasters can be predicted and evaluated. One of the problems lies in the need for quantitative assessment of the intangible phenomena, namely spirituality and cultural development of society, environmental consciousness of the population of the region, the willingness of society to bear personal responsibility for the decisions taken, and the development level of democratic thinking of the masses, etc. As a matter of fact, there is a precedent of the need for merging philosophy, sociology, ecology, innovative technology, statistics and hundreds of other paradigms in a single mathematical model in order to design a matrix describing both the current state of the system and predicting its state in the near future. The authors of this article developed the principles according to which such matrix works, and continue to refine them as a working hypothesis.

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Данилов С.М. КРИЗИСЫ И КАТАСТРОФЫ В ФУНКЦИОНИРОВАНИИ ГОРОДА КАК ОТКРЫТОЙ ДИНАМИЧЕСКОЙ СИСТЕМЫ. В современной научной традиции глобальные кризисы рассматриваются как явление, не дающее городам достичь устойчивости. В определенных аспектах рассмотрения проблемы подобный подход оправдан, но не всегда верен. Кризисы могут обладать собственной динамикой развития: рост, затухание и стабилизация. При затухании кризиса система возвращается в состояние устойчивости. При стабилизации – система начинает адаптироваться к постоянному дефициту. Когда кризис начинает расти, он грозит перейти в предкатастрофное состояние, а затем и катастрофу. Исключение многими авторами катастроф из связок кризис-устойчивость лишают исследования главного: параметра времени, отпущенного на принятие и реализацию определенных решений по стабилизации сложившихся ситуаций. На современном этапе общего развития знаний и технологий архитектура способна смягчить последствия большинства кризисов и стать надежным буфером между людьми и обостряющимися глобальными проблемами. Роль катастроф в развитии архитектуры является целью данного исследования.
Ключевые слова: город, архитектура, катастрофа, кризис, система, устойчивость.

Данилов С.М. КРИЗИ І КАТАСТРОФИ В ФУНКЦІОНУВАННІ МІСТА ЯК ВІДКРИТОЇ ДИНАМІЧНОЇ СИСТЕМИ. У сучасній науковій традиції глобальні кризи розглядаються як явище, яке не дає містам досягти стійкості. У певних аспектах розгляду проблеми подібний підхід виправданий, але не завжди вірний. Кризи можуть мати власну динаміку розвитку: зростання, загасання і стабілізація. При згасанні кризи система повертається в стан стійкості. При стабілізації - система починає адаптуватися до постійного дефіциту. Коли криза починає рости, вона загрожує перейти в предкатастрофний стан, а потім і катастрофу. Вилучення багатьма авторами катастроф із зв'язок криза - сталий розвиток позбавляють дослідження головного: параметра часу, відпущеного на прийняття і реалізацію певних рішень щодо стабілізації ситуацій що склалися. На сучасному етапі загального розвитку знань і технологій архітектура здатна пом'якшити наслідки більшості криз і стати надійним буфером між людьми і глобальними проблемами що загострюються. Роль катастроф в розвитку архітектури є метою даного дослідження.
Ключові слова: місто, архітектура, катастрофа, криза, система, стійкість.