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## **THE LAW ON THE CONSEQUENCES OF CATASTROPHE**

**Annotation.** The Law on the Consequences of a Catastrophe describes the interaction of past, present, and future under conditions of a catastrophe. The law is valid for any area of life: for individuals, and for their communities, as well as for all subjects and systems of animate and inanimate nature.

**Keywords:** catastrophe, time, being, past, present, future

*In order to formulate a pattern about the consequences of a disaster, four definitions should be given.*

**Definition №1.** A catastrophe is a non-periodic, relatively fast, uncontrolled, sudden event or phenomenon that brings destruction.

As can be seen from definition № 1, the properties of a disaster are:

1. Non-periodicity, i.e. the time intervals for a given type of disaster are very large and not precisely defined.

For example, a volcanic eruption is a periodic phenomenon. However, the period between eruptions can be hundreds or thousands of years, that is, many times longer than the lifetime of living beings, measured in years and decades; plus, the time interval between individual eruptions can vary very much, so within the definition of a catastrophe, a volcanic eruption is a non-periodic phenomenon.

2. Relative speed of the catastrophic process.

For example, for a fire, the duration of the process is from several hours to several days, the collapse of the state occurs over several years, and the extinction of a group of species can occur over thousands of years; but, in all the above cases, the course of destruction proceeds quickly relative to existence, and not for a long time.

3. Unmanageability.

The course of a disaster can be controlled, but only in a very limited way, and in many cases, it is impossible to control the catastrophic process at all. For example, a fire

can be controlled to a certain extent, but only up to a certain limit – large dangerous fires are unmanageable.

4. Suddenness or surprise, that is, there is often not enough time to save.

For example, people prepare for an earthquake by building earthquake-resistant buildings and structures, informing the public about the rules of behavior during an earthquake, and so on, but during the earthquake itself, many people often do not have enough time to escape.

5. Destructiveness.

This dangerous property of catastrophes brings death to living beings, deterioration of living conditions, destruction of matter and chaos.

**Definition №2.** The present is what dominated just before the disaster.

**Definition №3.** The past is what has dominated the present.

**Definition №4.** The future is what will dominate after the catastrophe.

#### Law on the Consequences of a disaster

**Disaster first brings the past to life, and then opens the way for the future.**

*Explanation of the law.* The catastrophe destroys the present that dominated before the catastrophe. The past, which in the present existed in an oppressed state, gets its chance to develop and begins to take the place of the destroyed present. But this catastrophe does not completely destroy the present (the present was formed, among other things, as a result of numerous catastrophes of the past, so it is impossible to completely destroy the present), which is why the present, partially destroyed by the catastrophe, begins to gradually recover, step by step pushing back the past that expanded due to the catastrophe and gradually suppressing it. When the present regains its dominant position relative to the past, it will no longer be the present, but the future, that is, a fusion of the present, the past catastrophe, and the elimination of the consequences of the temporary dominance of the past.

*In general, the catastrophe and its consequences are consistent with the laws of dialectics, according to which development proceeds in a spiral.*

The law of unity and struggle of opposites is the past that exists in the present; and the present that exists in the future.

The law of quantity-to-quality transition is a catastrophe itself: minor changes gradually accumulated and eventually caused a catastrophe.

The law of negation of negation is the breaking down of the structure of the present by the past, which arose immediately after the catastrophe; as well as the elimination by the future of the temporal dominance of the past after the catastrophe.

*To illustrate the operation of this law, a number of examples can be given.*

To begin with, it should be noted that such phenomena and events as rain in the desert, periodic plowing of the soil, border conflict, coup d'etat, exam, and so on are not catastrophes, since they do not meet definition № 1.

1. War, disintegration of the state, conquest of the state and revolution.

The past is the Stone Age of humanity: high mortality from diseases and from the use of weapons (men do not leave the house without weapons), a high risk of starvation, various forms of group marriage, physical strength and dexterity are valued in society.

The present is the peaceful life of citizens in the state.

After the catastrophe, the past partially returns to society – the levels of violent deaths and deaths from diseases increase, the number of weapons in the hands of the population increases, the level of armed crime increases (as well as the overall crime rate increases), there is a shortage of food (starvation is possible), the number of promiscuous sexual contacts increases, and so on. In society, such qualities of a person as physical strength, dexterity and aggressiveness begin to come to the fore.

The present is traumatized by the disaster, but it is trying to cope with it by introducing, among other things, wartime laws that allow it to stabilize the situation. In addition, trying to cope with the consequences of the disaster and being under the pressure of the past, people begin to feel nostalgic for the so-called "good old days" that were before the disaster: for the previous state (according to its laws, internal structure, ruler, form of government, controlled territory, and so on) and (or) for society (according to its morals, customs, traditions, and so on).

When the catastrophe comes to an end, the present gradually begins to recover: a new peaceful life begins – so comes the future.

The future is a new state, with new borders, with new heroes, with new traditions, with a new ethnic composition, and also, perhaps, with some new laws (which had no analogues before) and with new norms of morality; this future partially includes territory, heroes, traditions, peoples, morals and laws from the recent present, destroyed by the catastrophe.

2. Loss or damage of a vehicle (ship, plane, car, etc.).

Past – when this vehicle was not available.

Present – this vehicle exists, and it performs its functions.

Accident – the death of a vehicle or significant damage to it that prevents its further operation.

After the vehicle has ceased to perform its functions, the past is temporarily returned, that is, the time when this vehicle did not exist.

The present one tries to recover and repairs the vehicle or creates a new one that is similar.

But in the process of restoration or creation, the original vehicle is updated – so the future begins, in which there is either an updated vehicle after damage, or a new one with additional improvements.

3. Man-made disaster (destruction of a bridge, dam, factory, etc., possibly with radiation or chemical contamination of the area).

Past – when this structure did not exist and its function was not performed.

Present-this structure performs its functions.

Disaster – either just the destruction of this structure, or destruction with infection of the area.

After the disaster, the past is temporarily returned, that is, the time when this structure did not exist. Nature is beginning to recover.

The present is restored as much as possible: the destroyed structure is repaired or a new one is created, improved, taking into account the past disaster. The area is decontaminated if necessary.

So comes the future, in which there is a new or restored structure that performs the functions of the past. It is not necessary that the new structure will be built on the site of the past-the main thing is that the function of the past structure is performed. It is also not necessary to accurately reproduce the past technological process – time does not stand still, so the technology may be completely different. The main thing is that in the future, a function executed in the past will also be executed.

4. Natural disaster (fire, earthquake, volcanic eruption, tsunami, drought, etc.).

It should be noted that periodically occurring fires, floods, droughts, and other natural phenomena (for example, those that occur annually in a particular area) are not considered disasters, since they do not meet definition № 1.

Past – when this biogeocenosis did not exist.

The present – this biogeocenosis exists, and it develops freely.

Catastrophe – destruction of the landscape and mass death of living creatures of the biogeocenosis.

After a disaster, the past is temporarily returned, for example:

a) on the site of the burnt forest, grasses and shrubs that grew there earlier, before the forest was formed, begin to grow rapidly;

b) on the side of a mountain burned by lava, a lifeless landscape is formed, as it was there millions of years ago.

c) a tsunami leaves behind the chaos on land that it was on the shore millions of years ago, when plant life had not yet emerged from the ocean and the coastal strip was in the grip of severe erosion;

d) an earthquake causes rock collapses and cracks in the ground, that is, it creates chaos that was on land earlier, millions of years ago, before erosion and vegetation did not smooth it out;

e) the destroyed anthropogenic landscape begins to be overgrown and populated by wildlife.

The present is being restored: the forest begins to grow rapidly after a fire, grasses appear on the lava surface, the coastal chaos after a tsunami is cleared of salt by rains and re-overgrown with vegetation, the edges of cracks in the ground begin to crumble, the anthropogenic landscape begins to be recreated by human labor, and so on.

And then comes a future in which the forest has recovered from the fire, but not completely (the ratio of species has changed slightly); the composition of the soil after the eruption of the volcano has changed, because the same flora has grown there as before, plus some other plants; the chaos created by the tsunami has formed a new coastal landscape; the consequences of the earthquake created a new natural landscape, human labor created a new anthropogenic environment based on the destroyed one, and so on.

5. Extinction of a group of species (extinction of mammoth fauna, dinosaurs, and so on).

Past – when this group of species did not exist.

Present – in certain natural conditions, this group of species exists.

Catastrophe – natural conditions have radically changed, which led to the extinction of these species.

After the catastrophe, the past partially returns, when these life forms did not exist yet, for example: dwarf mammoths are formed ("there are almost no mammoths"), and giant flightless birds of prey take the place of predatory dinosaurs ("there are almost no tyrannosaurs").

The future – this group of species is completely extinct, meaning that there is no mammoth fauna or dinosaurs, but their ecological niches, as far as nature allows, are occupied by modern mammals:

a) In the current tundra, there are no living conditions for mammoths and woolly rhinos, so the ecological niche of large herbivores was occupied by reindeer.

b) The modern savanna and forest do not allow for the development of giant forms of reptiles, so in today's fauna the place of brontosaurus, ankylosaurus and duck-billed dinosaurs was taken by elephants, rhinos, buffaloes and hippos, and instead of tyrannosaurs and allosaurus, large cats – lions, tigers and leopards-now reign on Earth.

6. Irreversible damage to a living organism (injury, illness with complications, surgery, etc.).

The past – when this living organism did not exist.

Present – this living organism exists and is healthy.

Catastrophe – causing non-recoverable non-critical damage to the body.

After the catastrophe, the past partially returns, when this organism did not exist: the living being is sedentary, reacts poorly to external stimuli, has a poor appetite, sleeps a lot, and so on. This is "almost death", but death does not occur, and recovery occurs.

The future – a living organism is healthy again, but now it already exists, taking into account the damage caused by the disaster: for example, with scars, fused bones, the need to follow a diet, and so on.

### **Conclusion**

The law on the consequences of a catastrophe describes the rhythm of being, the measured flow of which was disrupted by the catastrophe.

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