The classical science considered itself as the standard-bearer of common sense. A no-classical science, on the contrary, underlined broke off with it. The modern post-no classical science dialectically comes back to common sense, owing to synergetic, and also – to new achievements in the quantum physics and cosmology. On this base are resolved paradoxes of sphere of the becoming, which have resulted XX-century physicists on a way of subjectivity. Including, a sensible explanation receive not local effects in various areas (a quantum entangled, universal gravitation), an invari-ance of speed of light in vacuum and many other things. Of quantum area the new physics explains uncertainty of a condition of quantum object and the raised role of the device as typical display of «super sensitivity» of any system to influence in «area of jokers». The origin of the Universe is understood now not as the «Big Bang» which has been not understood for common sense, but as the «Big Boiling» – natural process of phase transition primary vacuum environments in system of material structures. The sensible explanation receives an anthrop principle, which was mystified in a no-classical science.

Excess of speed of light by light self at its movement through the non-equilibrium environment naturally speaks that: this environment does not spend an entering impulse, and itself radiates a similar impulse from the opposite party. Not local there is only a process of self-organizing of the active environment. Understood becomes also quantum non-locality, including teleportation. Not local character of universal gravitation speaks the same basic basis, and waves of gravitation have no to it the direct attitude. All these explanations are reached without the contradiction with the relativistic theory, quantum physics and other achievements of a science of the last, no-classical stage of its development.

Classical science is aware of itself the standard-bearer of common sense. At the end of the XIX century Thomas Huxley stated bluntly: "Science - it's simply a well-trained and organized common sense" But at the beginning of the XX century non-
classical physics, relativistic and quantum sharply divorced from common sense and interpreted, by the mouth of Einstein as a "prejudice that person gets to the age of eighteen years".

It ceases to be a mystery, and the probabilistic nature of the description of the states in quantum mechanics. He explained through the same concepts and describes any process, repeatedly passing through the bifurcation point. In them a significant impact on the evolution of the system can provide even spontaneous fluctuations and media fields; But fluctuations have no reason, at least in principle accessible account. "The new (synergetic ) formalism attached ... (quantum), the probability of inner meaning, independent of the measurement," - says Prigogine [20, p. 16]. Thus, there is no need for subjective interpretations of quantum probability, contrary to common sense.

Accounting actions fluctuations and nonlocal correlations allow reasonable to interpret the "unpredictability" of a quantum object. Not in its essence, that there supposedly found some arbitrariness. On the contrary: on the move microparticles affect external nonlocal influences that are not fixed methods of causal analysis. You can imagine her behavior as an analogue of Brownian motion, but going beyond causation. Free electrons will - a funeral march and wreaths from fiction, common sense in physics - and a place of honor!

Synergetic Paradigm transformed ideas about the origin of the universe. But so far, not all are aware of the philosophical (ontological and ideological) opposed to the old and the new cosmology, a new theory is still often referred to as the old name of the Big Bang (Big Bang). Meanwhile, the theory of the Big Bang singularity, in its classical form, in fact long since rested in the Bose-Einstein.

According to the new cosmology, the universe did not arise due to the explosion of a massive body, "singularity", and in a phase transition in a normal environment vacuum-lake spatial environment. This transition is accomplished by the emergence of numerous "vacuum bubbles" forming a sort of garland. In this model, the absolute beginning of the universe is not considered necessary, but in principle also allowed the historically first "bubble" [11, p. 57-58]. If you like, call it the initial singularity -
the word suffering. If taking the word in its original meaning of "feature", and it is not surprising that these features much space.

Consequently, the modern model of the universe can be called synergistic; some authors and do. You can call it a vacuum, because the origin of the universe, it is not the primary body, and in before-material substance. You can also call it a non-singular, as is done Gleaner and Linda. Finally, there is historically a foothold, although not entirely accurate name - inflationary theory.

Of course, not in the name of the matter - but only if the name does not distort the essence of the matter. Therefore, you do not want to modern cosmology continued to call the Big Bang theory, even - "one of the many bombings," as expressed by M. Fig. Still image of the explosion can not be saved in the full form. His fans "forget" that we should talk about the explosion of the singularity as a body (not an abstraction as it explodes), and followed by S. Weinberg excel in the interpretation of the words, distancing himself from comparisons with a bomb and introducing the vague notion of "the explosion of the space" [12].

In fact, modern cosmology describes no explosion, no Big Bang, no matter how he was treated, but rather the Big Boiling (or, for short, Big Boil) - «Big boiling" of the original substance. Of course, every analogy limps. But the proposed way of at least justified by the fact that the boiling also has the kind of phase transition, and it also formed bubbles. And the explosion did not have the kind of phase transition, "bubbling" of the vacuum this image does not reflect, and only confuses the public and cosmologists themselves.

In particular, no explosion can not explain the actual act of inflation, when (in the first fraction of the first second of the universe) space apart boundaries much faster than the light travels in a vacuum. This is possible precisely because with inflation ("swelling" of space), as opposed to the explosion, mass and energy are not transferred in this space.

As you can see, views of gravity in modern cosmology contain sufficient apparent inconsistencies. Tolerate them only when notorious rejection of common sense, which was a feature of consciousness in non-classical science. And common sense says that if gravitation and Einstein's gravitational waves - is not the same, the
speed of propagation of the mutual attraction of masses is not necessarily the same as the speed of propagation of these waves. It may be so, that the rights of Laplace: mass attraction spreads much faster than light, and does not need in the extension.

At the time, Newton declared such non-local connection through the void agentless "blatant absurdity." But where he saw the emptiness of modern science asserts the existence of a particular environment - the physical vacuum. As a non-spatial environment he does outside the "speed" category. For the same reason, the physical vacuum has (as it is now recognized as) an unusual property of the invariant rest. Incidentally, because of this gets sensible explanation of another paradox of classical and non-classical physics - the immutability of limiting the speed of light (in a vacuum) for all frames of reference. Just light moves are not in the real environment, is always tied to a reference system.

As gravity agents could come, for example, "older sister" of the photon - De Broglie waves, and tachyons - superluminal particles, long known in the physical theory [24]. Of course, these issues require further discussion with the decisive participation of the natural sciences. But from the side of common sense and sober philosophy is no more obstacles to the recognition of non-local nature of gravity. We hope that it will help physicists to solve the difficult problem of the nature and gravity of the metric universe. Maybe - and dark until science question about the nature of dark matter and dark energy.

But overall, our conclusion is: at the present stage of development of natural science, of all his conclusions could get the interpretation from the standpoint of enlightened common sense, and without contradiction with the theory of relativity, quantum physics and other scientific achievements of the past, non-classical stage of its development.