ABOUT POSSIBLE MECHANISMS OF THE SOCIAL MANAGEMENT

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ABSTRACT

Based on the early developed approach for a NSP an analytical description, together with the social management redefinition, a possibility of the generalized approach application to the managing process is analyzed. The approach was reformulated in general form to be applied to a quantum size particles. Auto-correlation function values were calculated for each of the two approach predicted regimes for the 3-rd order NSP development. The mechanisms of the revealed regimes were analyzed and associated with the "military" (ordered) and "civilian"(diffusive, disordered) transformations. One possible variant for a delay time non-monotonic dependence of the auto-correlation function was shown to exist for the 1-st regime of the NSP development. The three possible variants were observed for the 2-nd regime. Two of the variants were analogous each other in conserving similar, relatively high ordering levels for the most time periods of their developments but having decreasing and increasing dependence parts on the finishing stage of the development. The third variant has monotonously decreasing time dependence of the auto-correlation function. The above conclusions from the obtained results were shown to be confirmed by the relevant data from the modern and historical management practice.

Keywords*: a social managing process reformulation, 3-rd order non-stationary stochastic process, generalization of early developed analytic approach, auto-correlation function calculations, features of the mechanisms for the two management process regimes***.**

INTRODUCTION

Based on [1-5], social management may be defined as a combination of several methods for governing a group of people or an organization to transfer them in a new state, which provides to the group the most effective functioning. So, a management procedure should be considered as a time lasting process. Taking into account the existence of the starting and finishing points or corresponding time moments for the process, it may be considered as a non-stationary stochastic process (NSP).

Types or mechanisms of the management are an object of continuous interest and efforts of theoreticians and practical's [2,4]. Probably, the biggest attention to the problems of improving its effectiveness is paid at last few decades [1,3,5]. The main reason of the situation probably is the proven notion about crucial role of the management [1,3] in providing high effectiveness of industrial processes. Despite the contemporary situation, improving the management mechanisms has old history. Probably, as the oldest attempt to solve the problem, the change of the Old Commandment on the New Testament about 2500 years ago may be considered. It is known that the Old Commandment describes situations when God supervised humans directly, through His Prophets. In such cases Prophets transfer the God's commandments to the people and require their restrict obeying. In the cases of ignoring the requirements the people has punishments. The people lived under such management mechanism for some centuries until the low effectiveness of the mechanism became evident. Then God forced to make global flood. Later on, finally the next step was made – to manage people by informing everyone individually about the God's aims, that was made by showing the people the most trustable event: innocent death of the God's Sun- Jesus Christos. The modern history of the humankind also provide many examples of low final effectiveness of dictatorship and benefits of democratic societies, despite many lacks of the latter. The relevant examples of the notions are also existed in science and technologies: "military" and "civilian" phase transformations [6], totalitarian state regimes, destroying democratic societies etc. As the modern example of the relevant theoretical results, an analytic approach conclusions [7-9] should be considered. The approach was early developed and first applied for quantitative successful description of the 3-d order NSPs, one of which is the macroplastic deformation of crystalline polycrystals. Later on some aspects of our visible Universe evolution were also considered and explained[10].

1. BRIEF DESCRIPTION OF THE BASICS FOR DEVELOPED ANALYTIC APPROACH

Due to the detailed and specific description of the early developed analytic approach in [7-9], let us briefly describe its basics in the maximally general way. At first we should consider a macroscopic system as consisting of uncountable number of meso- or nano-scopic subsystems being at a time moment *t* under an action of the same external energy E gradient dE/dx at a constant temperature T. The following additional general assumptions have also to be made. Namely,

- any subsystem is equivalent to a whole physical object or any its component in our Universe;
- any subsystem chaotically oscillates in various directions in space so that its fixable (macroscopically measurable) distance and velocity of the macroscopic motion are averaged results of its individual oscillations or steps;
- the oscillations provide nanoscopic motion of a subsystem, the corresponding macroscopic velocity of which may be zero or not zero depending on amount of steps in alternative directions;
- changes of average (macroscopic) subsystem motion directions and the velocity are caused by an action of external energy gradient or forces according to known dynamics.
- acting an external force on a system provides the equivalent stress or force action on any subsystem comprised by the system.

All above assumptions are in accordance with the fundamental contemporary physical theories (strings and superstrings, dislocation theory, etc.) and are confirmed experimentally by the numerous observations of the plastic deformation , phase transformations in crystalline solids, and cosmology [7,10].

Some features of the approach and subsystems behavior in general case should be emphasized here. Namely, oscillations of the subsystems provide a special type of their motion, which we shall call "nano-scopic" e.g. undetected by macroscopic measurements one. This motion type includes a subsystem elementary steps in various spatial directions which may develop with equal and not equal probabilities of the alternative ones. Evidently, that the nano-scopic motion can provide the macroscopic or measurable motion with not zero average or macroscopic velocity, together with the zero one, depending to relation of the corresponding probabilities.

Taking into account that any existing in the Universe object, especially, tiny, quantum -size particle may be considered as the subsystem, its nano-scopic motion may be considered as an analog of the Brownian one and the corresponding nano-scopic velocity – as equivalent to the speed of light, c. Besides, the Heizenberg uncertainty relations should be valid [11] under such condition:

$$\Delta E \cdot \Delta t \geq h$$
$$\Delta p \cdot \Delta x \geq h$$

Dividing the inequalities by each other, we obtain:

$$(\Delta E \cdot \Delta t)/(m\Delta v \cdot \Delta x) = 1$$

Or

$$\Delta E = m \cdot \Delta v \cdot \Delta x / \Delta t$$

Based on the above assumptions, we may write:

$$\Delta E = m \cdot c \cdot \Delta x / \Delta t$$

Considering the relation $\Delta x / \Delta t$ as to be equivalent to the speed of light, as it was proposed above, we shall have the well known formula for the own energy of a unmoving macroscopically object:

$$\Delta E = m \cdot c^2$$

Using macroscopically measurable data, it may be also defined:

$$\Delta x = x/\Delta n_m$$
$$\Delta t = t/n$$
$$n = \Delta n_m + \delta n_n$$

Here, we denote:

x – is a macroscopically measurable distance having gone by a subsystem for the time t ;
t – is the macroscopic time that spends by the subsystem to move on the distance x;
n - is the whole number of elementary steps done by a subsystem for the whole time period t.
Δn_m– is a difference of numbers of elementary steps having done by a subsystem in alternative directions resulting in the subsystem macroscopic motion;
δn_n – is a number of a subsystem steps corresponding only to its nanoscopic motion or – macroscopic unmoving condition;

Δt – is a value of the elementary time interval for a subsystem to do one step, or to move on a distance Δx;

It should be emphasized that Δn_m may be equal to zero, that corresponds to macroscopically unmoving condition of a subsystem despite the continuation of its nano-scopic motion. Meantime n can not ever be equal to zero, because it corresponds to whole steps-number during life-time for a subsystem in the Universe or includes all steps, corresponding both to macroscopically moving (Δn_m) and the unmoving (δn_n) subsystem conditions, the last of which corresponds only to nanoscopic subsystem motion:

$$n = \Delta n_m + \delta n_n$$

Going back to equation (3), we may write now:

$$\Delta E = m \cdot c^2 \cdot (n / \Delta n_m)$$

$$\Delta E = mc^2 [1 + (\delta n_n / \Delta n_m)] \qquad (1)$$

As it flows from eq.(1), increasing δn_n together with decreasing or constant Δn_m under the initial condition $\delta n_n / \Delta n_m < 1$, leads to increasing an energy consumption ΔE providing further subsystem macroscopic motion. The above result should be interpreted as: slowing down the macroscopic motion of a subsystem requires increasing energy consumption to provide continuation of the subsystem macroscopic motion. Evidently, the situation corresponds the slowing down of the macroscopic subsystem motion by an obstacle. In other words - the stronger an obstacle is, the higher energy consumption providing a subsystem further motion is required. The other variants of the initial relation $\delta n_n / \Delta n_m$ e.g. $\delta n_n / \Delta n_m > 1$ for material objects in our Universe is practically unreal, due to the known continuous macroscopic motion of all material objects after the Big Bang contrary to its unmoving: $\delta n_n / \Delta n_m < 1$, condition. The above conclusions are in accordance with the results of the approach application to the macroplastic deformation of polycrystalline FCC metals [8-10].

To go further, the probabilities should be specified to describe a subsystem and the whole system behavior. Taking into account the just given definitions and the results shown in [7-9], the corresponding probabilities were defined as: $p_I(dE/dx,t)$, $p_{II}(dE/dx,t)$ and $P_I(dE/dx,t)$ $P_{II}(dE/dx,t)$. Here $p_I(dE/dx,t)$ is the probability for a subsystem to occupy low energy state or to be only in nano-scopic motion without macroscopic one and $p_{II}(dE/dx,t)$ – is the probability to occupy high energy level by a subsystem or to be in a combined nano-scopic and macroscopic motion. As to the rest probability characteristics, they relate to the whole system with respective peculiarities of the possible system states. To specify the corresponding formula, we take into account that a subsystem being at a constant temperature T and has to be considered as able to exchange thermal energy with a reservoir having the same temperature. Evidently that all physical objects, surrounding a subsystem and being in thermal contact with it, may be considered as a reservoir. Then, the probability for the subsystem to occupy an energy state has to be proportional to multiplication of the corresponding number of states for a subsystem and a reservoir [7,12]. Namely, for the highest energy state of a subsystem, we may write:

$$p_{II}(\varepsilon,t) \propto q(\varepsilon,t) \cdot Q[(E-\varepsilon),t], \qquad (2)$$

where $q(\varepsilon,t)$ is an available number of microstates for a macroscopically moving subsystem;

$Q[(E-\varepsilon),t]$ – is available microstates number for a reservoir.

Besides, an energy of a subsystem which is under an action of external energy gradient dE/dx or external force $f = dE/dx$ and macroscopically moves in a spatial direction x has to be dependent on two factors: $\varepsilon = \varepsilon\ (f,x_0)$ where x_0 - is a coordinate of a point of a subsystem location. Here we suppose that $x_0 = x_0(t)$ due to the physical vacuum oscillations, which, evidently effect on a subsystem in any energy state as a quantum physical object. As it follows from (2), the crucial step to specify $p_{II}(\varepsilon,t)$ is the definition of $q(\varepsilon,t)$ due to $Q[(E-\varepsilon),t] = const$ for a macroscopic reservoir. Besides, for a quantum size subsystem one should write [7,12]:

$$\ln [q(\varepsilon + \delta A; f + df)] - \ln [q(\varepsilon; f)] = - [\partial\alpha/\partial\varepsilon] \cdot df \qquad (3)$$

where $\alpha = \delta A/df$.

$\delta A = d\varepsilon$ is a macroscopic work done under a subsystem, occupying any energy state, including the highest one with the energy ε.

Besides, for an energy of a subsystem, we may write:

$$d\varepsilon\,(f,x) = [\partial\varepsilon/\partial f]\cdot df + [\partial\varepsilon/dx]\cdot dx \qquad (4)$$

Based on the above assumptions, it may be stated that for any ordinary subsystem (unmoving or moving dislocation segment as a typical representative of the one), an increasing the external force ($df > 0$) rising its energy e.g. $\partial\varepsilon/\partial f > 0$.

For a subsystem in general case, the possible reasons of the effect may be caused by changes of internal energy of a subsystem, because of, probably, changes of its spatial configuration (as a string in analogy with mobile dislocation segment). In a particular case of a mobile dislocation segment, the above its energy changes are caused by the change of a length of a moving segment.

On the other hand, for a subsystem macroscopically moving along *x* direction so that $dx > 0$, two variants of a subsystem energy changes with a distance are possible: $\partial\varepsilon/\partial x > 0$, $\partial\varepsilon/\partial x < 0$.

Namely, a subsystem macroscopically moving ($dx > 0$) under an action of an external force has to overcome existing obstacles that require its energy increasing (See eq.1) or restoration of the subsystem energy ($d\varepsilon > 0$). As an example, the mobile dislocation jerky glide may be considered which is accompanied by increasing concentration of jogs on the dislocation segment. So, in such a situation, one should write: $\partial\varepsilon/\partial x > 0$.

On the other hand, for the case of a macroscopically moving subsystem, just after an obstacle overcoming, one should write: $\partial\varepsilon/\partial x < 0$, because a subsystem motion continues ($dx > 0$) to occur under decreasing energy ($d\varepsilon < 0$) accumulated before and used for the obstacles overcoming. So, for the considered case one should write: $\partial\varepsilon/\partial x < 0$. As an example, the motion of a mobile dislocation segment, just after an obstacle overcoming in a crystalline lattice may be considered.

Besides, taking the above into account, we shall obtain from the equation (3):

$$d\{\ln[q_{1,2}(\varepsilon,f)]\} = -(\partial\alpha/\partial\varepsilon)\cdot d\tau$$

where $\tau = f/S = (dE/dx)/S$ - is an external stress acting on a subsystem;

$S = const$ – is a square of a system which is under the action of external force $f = dE/dx$;

$\alpha = d\varepsilon/d\tau$;

$d\varepsilon = \delta A$ – is infinitively small amount of work, done by external force *f* under a subsystem.

Conducting the elementary algebraic transformations, we obtain for the case of a unmoving subsystem, compressed to a nearest obstacle, but has not overcome it:

$$d\{\ln[q_1(\varepsilon,f)]\} = -\,d\tau/f$$

Taking into account that:

$$\tau = f/S$$

We shall have:

$$d\{\ln[q_1(\varepsilon,f)]\} = -\,(df/f)(1/S)$$

or:

$$q_1(\varepsilon,f) \approx q_0\cdot(f_0/f) \qquad (5)$$

where q_0 and f_0 – are integration constants.

So, the last relation defines the number of energy microstates available for a subsystem when it does not transfer energy within a system been under an action of external force *f* determined by an energy gradient applied to the system. Besides, for the alternative situation or for a subsystem macroscopically moving after an obstacle overcoming until a next obstacle is reached, we should write:

$$d\{\ln[q_2(\varepsilon,f)]\} = d\tau/f$$

$$\tau = f/S$$

Then, we shall have:

$$d\{\ln[q_2(\varepsilon,f)]\} = (df/f)(1/S)$$

or:

$$q_2(\varepsilon,f) \approx q_0\cdot(f/f_0) \qquad (6)$$

Thus, the last relation shows that the number of energy microstates available for a subsystem when it transfers energy within a system been under an action of external force *f* is determined by an energy gradient applied to the system and is directly proportional to the applied force *f*.

The both just considered dependencies are in accordance with well known experimental data concerned with the Bordony peak [15]. According to [15], a mobile dislocation segment initially fixed at pinning points decreases its available microstates being pushed to an obstacle by an external force. Meantime, just after overcoming the obstacle, a number of the segment microstates is rapidly increased under the same loading conditions due to the jogs formation

As it seen from the relations (5) and (6), the corresponding time dependencies have some unrealistic features, namely: $q_1(\varepsilon,f)\to 0$ at $f\to\infty$ and $q_2(\varepsilon,f)\to 0$ at $f\to 0$. Therefore, in general case, we shall use further the scheme shown on Fig.1. Recalling also that $\varepsilon = \varepsilon\,(dE/dx,\ x)$ and $x = x\,(t)$ we shall write further: $q_2(\varepsilon,f)\equiv q_2(f,t)$. Hence, under the loading conditions $f \geq f_0$, for the quantity $q_2(f,t)$ we may write:

$$q_2(f,t) = q_2(f_0\,,t) + \{\partial[q_2(f_0\,,t)]/\partial f\}\cdot(f-f_0) + \{\partial^2[q_2(f_0\,,t)]/\partial f^2\}\cdot(f-f_0)^2 + \ldots$$

$$q_2(f,t) \approx q_2(f_0\,,t) + q[(f-f_0),t] \qquad (7)$$

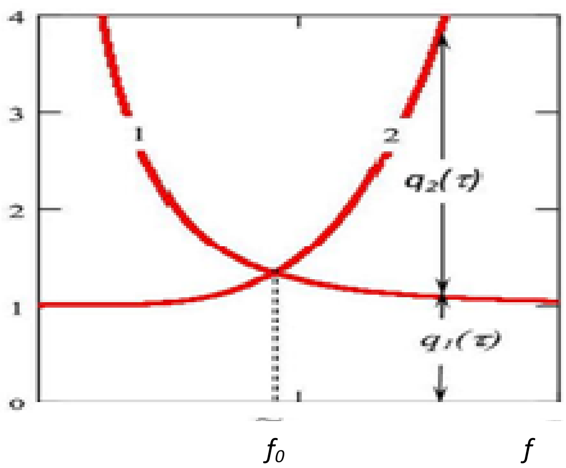

Fig.1. Schematic representation of the external force dependences for numbers of energy states for a subsystem been in macroscopically moving $q_1(f)$ (curve 1) and unmoving $q_2(f)$ (curve 2) conditions

Additionally, from the above relations and the scheme shown on Fig.1, under the considered loading condition $f \geq f_0$, it may be written:

$$q_2\,(f_0\,,t) \approx q_1(f_0\,,t) \approx q_1\,[(f),t]$$

So, the relation (7) may be rewritten as:

$$q_2(f,t) \approx q_1(f,t) + q[(f-f_0),t], \qquad (8)$$

As it seen, components of the last relation define numbers of microstates available to a subsystem being under an action of an energy gradient $f = dF/dx$, respectively, in: a state in which subsystem is unmoved macroscopically due to be pushed to an obstacle without its overcoming but continue to move nano-scopically, $q_1(f,t)$; a state when a subsystem just has overcome the obstacle and continue to move both macro- and nano-scopically for a long distance, $q[(f-f_0),t]$ to the next obstacle. Proceeding from (7), scheme shown on Fig.1 and a probability definition, we should write:

$$p_I(f,t) = q_1(f,t)/\,q_2(f,t) \qquad\qquad p_{II}(f,t) = q[(f-f_0),t]/\,q_2(f,t),$$

Using also the above scheme and the probability normalizing condition, we obtain:

$$p_I(f,t) = q_2(f_0,t)/\,q_2(f,t) \qquad\qquad p_{II}(f,t) = 1 - q_2(f_0\,,t)/\,q_2(f,t),$$

Besides, for any system with unlimited energy spectrum, a number of available states is a rapidly increasing function of the system energy [12]. So, in our case of the subsystem, it may be written: $q_2(f\,,t) \sim f^{\,n}$, and $q_2(f_0\,,t)\sim f_0^{\,n}$ where $n = n(t)$ is non-negative parameter related to a subsystem degrees of freedom. So, we may rewrite the last expressions as:

$$p_I \approx (f_0\,/f)^n \qquad p_2 \approx 1 - (f_0\,/f)^n \qquad (9)$$

It should be emphasized, that expressions (8) defines the probabilities of the long distance, macroscopic motion of an individual subsystem able to carry energy under an absence of other ones. In more realistic situation we should consider a system consisting of numerous subsystems which are not interacting each other due to large between distance and are under an action of the same energy gradient and able to transfer an energy within the system. Evidently that, non interacting subsystems may be observed under the condition of great distances between them that is just observed in our Universe.

So, overall quantity N of the subsystems in a whole macroscopic size system having volume $V \to \infty$, may be defined as: $N = \rho_v \cdot V$, where ρ_v - is volume density of the subsystems. Considering the subsystems as indistinguishable ones and their independent behavior due to absence of interaction between them, it may be written for a probability to find an arbitrary chosen subsystem in the state of long distance macroscopic motion: $[1 - s\cdot(1/\rho_v \cdot V)]$, where $s \equiv (f_0/f)^n$. Further, the probability of the joint macroscopic motion of all the subsystems within a system or the probability for a macroscopic system to be in the state of internal energy transferring, will be:

$$\lim_{N\to\infty}(1 - s/N)^N = \lim_{\rho_v \cdot V\to\infty}(1 - s/\rho_v \cdot V)^{\rho_v \cdot V} = e^{-s} = exp(-f_0/f)^n$$

Finally, the probability to find a whole system in the state when its internal energy is not transferred by the long distance, macroscopic motion of consisted subsystems is:

$$P_I(s) = 1 - exp(-(f_0/f)^n)$$

and the probability for the same system to translate its internal energy by the long distance motion of consisting it subsystems is:

$$P_{II}(s) = exp(-(f_0/f)^n)$$

It is necessary to emphasize an important role of the parameter $s \equiv (f_0/f)^n$ in description the behavior of:
- a quantum size subsystem able to transfer an energy due to its macroscopic motion under an action of an energy gradient; a such individual subsystem been a component of a macroscopic system consisting of uncountable non-interacting subsystems which provide the system internal energy transport by their macroscopic motion; the whole macroscopic system which internal energy may be transferred by the long distance, macroscopic motion of consisted quantum size subsystems.

2. AUTOCORRELATIONS FOR THE VARIOUS NSP REGIMES

According to the known definition [13] *auto-correlation function* (ACF) characterizes an effect of previous values of a NSP on its future values. In other words, ACF reflects similarity or predictability of a NSP parameter during NSP development. For the most general argotic NSPs, we calculated ACF or $C_j(\tau)$, for each of the regimes ($j = 1,2$) using the formula [13]:

$$C_j(\tau) = \frac{1}{T}\int_0^T s_j(t)s_j(t+\tau)dt$$

where: τ - delay time of observation under a NSP,
T - time interval of the observation.

Computer calculations results are shown on Figs.2 and 3. Fig. 2 demonstrates, particularly that delay-time dependences $C_1(\tau)$ for the 1-st revealed NSP regime is, in general, non-monotonic. Namely, at a small the delay-time values or at the beginning of the NSP development, $C_1(\tau)$ increases, that should be interpreted as an ordering in energy carriers behavior. But, going further, e.g. at a bigger delay-times, $C_1(\tau)$ decreases, approaching very low, but practically constant level. Such calculation results, evidently, (see Fig. 2) show, at first, very low overall ordering levels (or $C_1(\tau)$-values) during all the time of the Universe existence. Besides, relative increasing the ordered behavior level may be observed only on the beginning stages of such NSP regime. Further, ordering behavior level rapidly decreases that means the disordering (chaoticity increasing) in the behavior of the subsystems on later stages of the 1-st revealed NSP development regime. These conclusions are confirmed by the numerous experimental observations of the dislocation substructure formation and its evolution in deformed polycrystalline metals [14].

As regards to the 2-nd regime of a NSP development, it was also shown [7,10] three possible variants of the delay time dependence $C_2(\tau)$ at various the approach constant values: - monotonously decreasing dependence (see Fig.2 curve 2) and two nonmonotonic ones (Fig.3 curve 1,2) [10]. The interpretation of the dependencies is proposed as follows: under some of the whole system structure types the behavior of the energy carriers is rather ordered with continuation the increase of the order level. Meantime there may be the whole system structure types for which the energy carriers behavior is ordered during the most time of the system evolution, but decreases practically to zero closer to finishing the evolution. The regulations described, may be frequently observed for many human societies evolution.

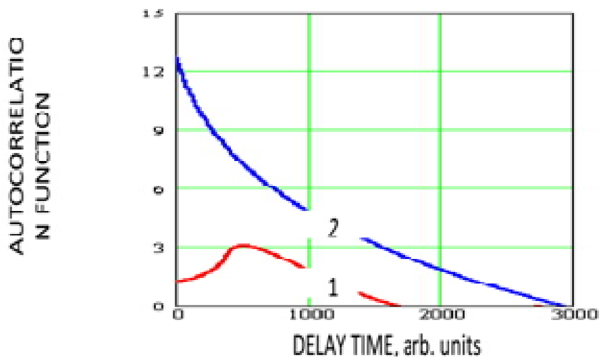

Fig.2. Delay time dependencies of the ACF for the 1-st (curve 1) and 2-nd (curve 2) regimes of a NSP at $A_1 = 2.02, \hat{t}_1 = 1300\ s; A_2 = 10^{4.2}, \hat{t}_2 = 30\,s$

3. TWO POSSIBLE MECHANISMS OF THE SOCIAL MANAGEMENT

Taking into account numerous observations of the basic features of a 3-rd order NSP during a process of managing a group of people or social management, namely: 1) a time period for explanation the management ideas to the people, their understanding by the people without the most people active participation in and supporting the process; 2) increasing support of the governing efforts and active participation of the people in the management process; 3) full support, understanding and all people participation in the management process, we may apply the early developed and above discussed the approach general results to analyze the social management process.

The main relevant results may be formulated as follows:

- Human individuals, forming a group of people which is managed, have to play, and really do that, a role of subsystems transferring the energy of the Big Bang in the Universe, including providing conservation (the industry sustainable development) and homogenizing (human multiplication) the transferring
- A social management process can develop by two possible mechanisms, one of which develops as a "military" transformation and another – as a "civilian" one.
- Behavior of the individuals participating in the military management is rather ordered and demonstrates some predictability, especially on the starting stages of the governing process (see Fig.2). Further, the "military" management leads to decreasing the predictability or increasing of the disordering a social group members behavior.
- Behavior of humans participating in the civilian management in general is more ordered compared with the military one and may have three various types of the delay-time dependences at various the model constant values (see Fig.3).
- Two of the possible variants of the civilian governing for a group of people, are characterized by the decreasing with delay-time the levels of the subsystems initially high ordered behavior. For one of the two variants, the monotonously decreasing is observed, but – for the other variant, a practically constant ordering level is conserved for the most time period of the managing process, with the level decreasing at the finish of the NSP (see Fig.3,curve 1).
- The third variant of the same civilian governing, is characterized by the initial practically constant the ordering level, which increases on the

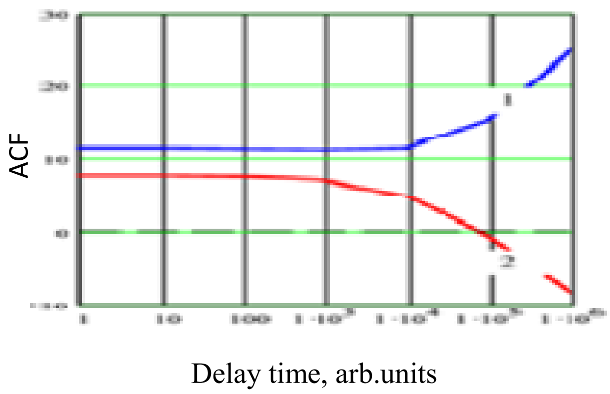

Fig.3. Delay time dependencies of the ACF for the 2-nd regime of a NSP at the approach constants values: $A_2 = 10^5$, $t_2^0 = 30$ arb.units (curve 1) and $A_2 = 10^7$, $t_2^0 = 30$ arb.units (curve 2)

finishing stages of the NSP development (see Fig.3,curve 2);

- Taking into account the well known features of the totalitarian and democracy societies, the revealed mechanisms of the social management should be associated, respectively, with the dictatorship and democratic methods of the governing a groups of people.

CONCLUSIONS

1. Based on the early developed approach for describing a 3-rd order NSP evolution, human creatures are proposed to be considered as a kind of subsystems transferring the energy of the Big Bang in our Universe.
2. A social management is proposed to be considered as consisting of 3 time stages: 1) a time period for explanation of the management ideas to the people, their understanding by the people without the most people active participation in and supporting the process; 2) high support of the governing efforts and active participation of the people in the management process; 3) full support, understanding and all people participation in the management process, we may apply the early developed and above discussed the approach general results to analyze the social management process.
3. The basics of the applied approach are generalized for the case of tiny, quantum –size components of any physical objects in the Universe.
4. It is shown analytically a possibility to apply the approach to the 3-rd and 2-nd order NSPs.
5. The differences of the mechanisms for the revealed earlier two regimes of the 3-rd order NSPs is considered in detail taking into account their relation to a social management.
6. Calculations of the auto-correlation function values for both the above regimes of a NSP show the preferably ordered (military) and disordered (diffusive) mechanisms of the 1-st and 2-nd regimes, respectively.
7. Possible variants of the civilian or democracy societies development include two regimes one of which finishes destroying or rising chaos but another- rising the ordering in the components behavior.
8. Particular acceleration of the disordering in subsystems behavior on the finishing stage of one the 2-nd regime possible variant is in accordance with the New Testament predictions of the Dooms Day .

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