

# **Cybernetic Approach in Regional Infrastructure of Governance/E-Governance to Long-Life Development (Study in Social Cybernetics)**

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## **Abstract**

*The paper formulates and demonstrates a lot of theorems on regional social cybernetic systems, including electoral / administrative systems of country. It is the nucleus of a formal system. The paper introduces in scientific circuit concepts of national ring, core of national ring, constructive system, destructive system, optimal number of parties. By author first it formulated cybernetic criteria to driving the regional cybernetic social system in real time.*

*Keywords:* cybernetic systems, concepts, politics, governance

## **1. Lexical.**

Between evaluation and study of them, auhor selected the notions of domain of definition. Minimal list of notions following notions include.

Idea, notion, concept, opinion, judgment, conception basic principle, plan, project, sentence, statement, saying, definition, demonstration (proof), ring national core ring national, system stable, government program (GP), object manager, object driven, policy decisions, decision rule, feedback loop, system constructive, system destructive, optimal number of parties, tank, Snaiper, Grenade, Scholar, careerist, Ever-of-agreement, I then man anymore, man-not, Weep.

## **2. Dictionary. Introduction.**

This is to understand in the same sense theorems proposed specifying notions.

- 1) Idea - 1. A product of the activity of thought; idea, concept; opinion, judgment. 2. Conception basic principle. 3. Plan project. [1, p. 285]
- 2) Ideation - the process of forming ideas. [1, p. 285]
- 3) Meaning - fundamental logical way, reflecting the essential characteristics, general class of objects; is expressed by the word. 2. General knowledge about something. [1, p. 431]
- 4) Concept - concept, the general idea. 2. Draft, sketch. [1, p. 130]
- 5) View - 1. Opinion, point of view; idea, concept. 2. Feedback unfounded, illusion, delusion. 1, [p. 471]

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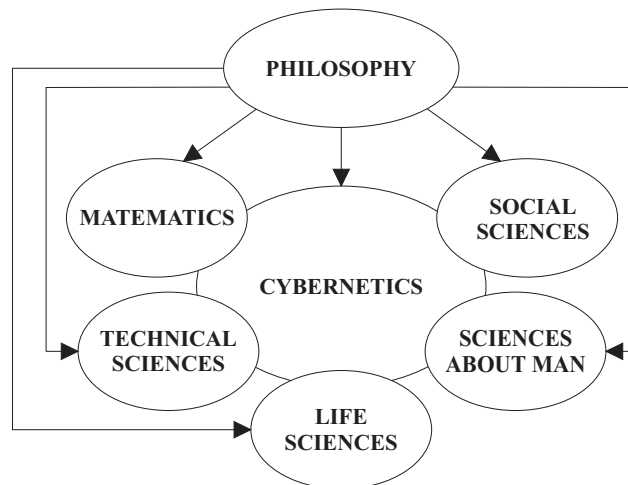
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- 6) Judgment - 1. Faculty to think logically. 2. feedback, idea. 3. Law: The act of judging, debate process. [1, p. 341]
1. Basic concepts - way of thinking or design something new; set of ideas on matters philosophical, scientific, literary, etc. overview of existence. [1, Pag.130]
  2. Principle - 1. Thesis fundamental basic idea; fundamental law of a science or an art. 2. Source primordial, primary cause. 3. Conviction, legally. [1, p. 524]
  3. Plan - methodical organization of parts of a work of science, literature etc. [1, p. 493]
  4. Project - 1. plan future actions; 2. The first drafting a provisional plan, laws, etc., to be discussed and approved to be implemented. 3. Technical Paper containing the data necessary for the execution of construction of a plant etc. [1, p. 529]
  5. Sentence - the smallest syntactic, expressing a judgment, an idea; Merge log words expressing a complete idea. [1, p. 530]
  6. Assertion - affirmative or negative statement which is given as TRUTH. [1, p. 45]
  7. Statement - expression of an opinion support. [1, p. 18]
  8. Definition - determining the content of a concept; sentence expressing this operation. [1, p. 166]
  9. [N. A.] Definition - which determines the sentence of a term.
  10. Proof - reasoning that establishes the truth of an assertion; prove a truth by arguments, evidence, etc. [1, p. 169]
  11. [N. A.] Core national ring - sacred information: personalities, triumphs, texts, songs, costumes, national dances, paintings, videos, films, dreams, master plans etc. the majority of the people of (strategic).

### 3. Stability of an electoral / administrative system (party, alliance, government, parliament)

We will examine the issue in terms of cyberspace. Cybernetics relations with other sciences are illustrated in Figure 1.

**Figure 1. Links of cybernetics with other sciences.**



*Definition 1.* Theorem - Stated, whose truth is the result of demonstrations. (1, p. 680)

*Definition 2.* Utterance - Exposure to a judgment of a completely understand. (1, p 210)

*Definition 3* [1 of auth.]. Sentences to completely understand, whose truth value (TRUE / FALSE) can prove theorems are called.

*Definition 4* [2 of auth.]. A ring is called nonempty  $R \cup T \cup S \cup G \cup C$ , for items which are defined two operations binary very similar to assembly ( $\vee$ ) and multiply ( $\wedge$ ), satisfying the following axioms:

$$1) a \vee b = b \vee a$$

$$2) a \vee (b \vee c) = (a \vee b) \vee c$$

Information equation  $a \vee x = b$  have solution: the author have developed methods for solving; (Omit - exceeds the current theme); For example, a - party program, x - tacit understanding between parties; b - government program (PG).

$$3) a \wedge (b \vee c) = (a \wedge b) \vee (a \wedge c) \text{ și } (b \vee c) \wedge a = (b \wedge a) \vee (c \wedge a), \text{ where } a, b, c - \text{sentences, } x - \text{propositional variable (Bertrand Russell); } R - \text{(real) numbers, } T - \text{set of letters, punctuation and special symbols, } S - \text{set of elements of sound, musical, } G - \text{set graphics, } C - \text{set of elements combined } R \times T \times S \times G.$$

*Definition 5* [3 of auth.] It's called national ring, NR (national belt) sacred commitment and responsibility towards the country, provided by art. 56 of the Constitution of Moldova of Republic, all laws {a}, national interests {b}, skills {c}, customs {d}, characteristic features of national {e}, strategic goals national {f} integrated into history, territory and language, traditions and common references.

For example, when pronounce NR in Moldova "our language" shall apply scientifically grounded value - Romanian.

Regarding the parties: the Supreme Law provides art. 41 (1-7) of the Constitution "Freedom of parties and other socio-political organizations", which is essential for Ring national electoral issue / administrative addressed. However, it stipulates that parties do not satisfy the ring national (art. 41 p. 4): "The parties and other socio-political organizations which, by their aims or activity, militate against political pluralism, the rule of law, sovereignty and independence, territorial integrity of the Republic of Moldova are unconstitutional [3, art. 41, p. 4].

I suppose that trip early 2015 Socialist party abroad affect this article.

Remark. In the section "laws" can not contradict national laws ring "international ring" and that contradicts laws of country, is applied international ring [3, art. 4].

[N. A.] Core of national ring containing sacred information: personalities, triumphs, texts (scientific, literary, spiritual), songs, costumes, national dances, paintings, videos, films, dreams, master plans etc. the majority of the people of (strategic).

The core ring requires national attention - in accordance with art. 56 of the Moldovan Constitution. In this case the current administrative system problems would disappear [3, art. 56].

The main objects of study of cybernetics and connection management are laws in nature, technology and society. In particular, are studied cybernetic system,

connection and balance, management and self-management of cybernetic systems. Cyber methods can apply to study of electoral and administrative system.

*Definition 6.* Definition of a system steady - entry procedure for which sizes (input) and output (output) are invariant over time [1, p. 636].

*Definition 7* [4 of auth.]. The Systems that can achieve a stable systems are called steady.

**Theorem 1.** A system is stable if and only if it is non-contradictory on the inside and on the outside not isolated (development of principle [2, p. 113] in the theorem).

For example, a political party in Moldova is stable when, and only when non-contradictory on the inside and on escher Not isolated country's political and stable political parties in the world. Examples party naked: LDP and LP. Ie non-contradictory inside the party - LDP (situation in October 2015).

To demonstrate the proof of the theorem we apply the theorem about the incompleteness theorem of Kurt Gödel, that "In any non-contradictory theory and quite rich first order there as a closed formula, that neither the formula nor its negation of this theory are not deductible." The demonstration will use sentences  $\sim L$  and  $L$ , for example, the sentence  $L$ : The post of president is shared between parties; sentence  $\sim L$ : The post of president is not sharing between parties.

The necessity.  $S1$  be - given a stable system (eg party, and for the program that is compatible with national ring) and  $S2, S3, \dots, Sk$  - ambient systems (areas / parties subject to connection). If the system is stable, then the system / software there is a sentence  $L$  so that it can not be fixed truth value of any sentence  $L$  nor the sentence  $\sim L$ ; but according to Gödel theorem in any system there so  $L$  and  $\sim L$  sentences whose truth value can be established. Ie any system at a stage of development is contradictory on the inside. But because the system  $S1$  - a stable given, it follows that there is an  $S_i$  ( $i=2, 3, \dots, K$ ) such that the  $S1 \cup S_i$ , [where  $S1 \cap S_i \neq 0, S1 \neq S_i, L \subset (S1 \cap S_i)$ ] the truth of the proposition  $L$  (and sentence  $\sim L$ ) can be established. But this means that the system remains non-contradictory  $S1$  on the inside is not isolated on the outside as  $S1$  and  $S_i$  are linked by  $L$ . I assumed  $S1$  system is stable and we have proved that the system  $S1$  is non-contradictory on the inside and on the outside Not isolated ( $S1 \cup S_i$ , [where  $S1 \cap S_i \neq 0, S1 \neq S_i, L(S1 \cap S_i), (i=2, 3, \dots, k)$ ]), and  $\{S1, S_i, L\} \in R \cup T \cup S \cup G \cup C$ .

For example, sentences  $L$ : prosecution to be politicized;  $\sim L$ : prosecution not to be politicized.

Parties LDP, DP and LP have several pairs of sentences type  $L L$ . Party PCRM has sentence: We will help to choose the governing bodies and  $\sim L$ : We will assist in the selection of the Board. Other sentences  $L$ : It will celebrate May 9;  $\sim L$ : Do not celebrate 9 May.

It can be stated that in Moldova all pairs of sentences  $L$  and  $\sim L$  worthless truth  $\sim$  alliance lead to early elections.

Sufficiency. Whether we have a system  $S1$  Not isolated non-contradictory on the inside and non-isolated on the outside. We must prove that  $S1$  is stable. Since  $S1$  is non-contradictory on the inside in his program are not (and principles / conditions / actions, delegated  $S1$  for forming new system - Parliament / PG) does not lead sentences shares /  $L$ , that it can not be fixed truth value of sentences /  $L$  and  $\sim L$  shares, exits from the

system by parliament are invariant (smoothly). As a result of the business cycle in parliament on feedback inputs S1 system is developed inputs invariant over time. Such a situation can only be the case when the principles / conditions of entry and exit S1 S1 does not change over time. Ie S1 led the system with the system leader - parliament - working steady (without shocks). In these circumstances defined 6 S1 system is stable. I assumed that S1 is non-contradictory system on the inside and on the outside Not isolated and demonstrated that S1 is stable. The proof is evident in the case when systems are included in one another, ie the system S1 este subsystem of another system.

*Definition 8* [5 of auth.]. The organization, which does not fall within the national ring (national belt) is called destructive organization [3, art. 41, p.4 - unconstitutional].

**Theorem 2.** An Alliance (metasistem [6]) government is stable then and only then, when component systems (party alliance) am contradictory programs / actions are consistent with national and alliance ring (metasystem [6]), is insulated on the outside the party / parties in opposition and stable political parties in the world.

Proof of the theorem. It is proved analogously to Theorem 1. The alliance consists of three matches.

We note with alliance parties' programs P1, P2 and P3. If we denote the ring NR national plan of government with PG, the EU association agreement with CAUE note it, then we have:

$$P1 \subset IN, P2 \subset IN, P3 \subset IN, P1 \neq P2 \neq P3, P1 \cap P2 \neq \emptyset, P1 \cap P3 \neq \emptyset, P2 \cap P3 \neq \emptyset, P1 \cup P2 \cup P3 \subseteq IN. P1 \& P2 \& P3 \subseteq PG.$$

Obviously,  $GP \subseteq CAUE$ . The big weight is to generalize and coordinate programs (ideation:  $P1 \& P2 \& P3 \rightarrow GP \subseteq CAUE$ ).

Alliance will interact with the European Union. That implies the need for a cybernetic system, consisting of leading EU system, direct channel (feedforward) alliance, feedback connected to the EU. Feedback, in turn, will consist of two variables: Command and Status system, repeated one after another and determine one another. The overall structure of the feedback loop includes also the difference (error) between actual status and desired status of the system, policy decisions and rule makers. New desired state determined by the following rule policy decision makers; again determine the difference and so on. a. m. d. Cycle-state-control-political\_decizional-rule\_of\_decizion difference is the motor feedback loop (cycle minimum: Fresh-order difference). Understanding the functioning of feedback loops require a description of the relationship and effect established between state variables and command them up. It becomes possible to develop models of feedback loops either as mathematics (differential equations and finite difference - equation (8) below) or as symbolic (models of the effects of transmission). Elementary loop consisting only of state and control is equal to delay 1. Indeed, when t ut order to influence the state xt at time t, which in turn influences the order at time t+1 ut+1 ş. a. m. d.

Next we deduce the fundamental equation of dynamic feedback loop system (parliament RM) with the goal - EU membership.

The proportion depends on the desired status in the current real state,

$$\mathbf{D}_t = \mathbf{a} + \mathbf{b} * \mathbf{x}_t, \quad (1)$$

$D_t$  - desired state,  $x_t$  real state, both in period  $t$ .

Real state depends linearly on the expected state during  $t$

$$R_t = a_1 + b_1 * x_t^e \quad (2)$$

Expected state at time  $t$  depends on the condition expected at time  $t-1$

$$x_t^e = x_{t-1} + \alpha(x_N - x_{t-1}) \quad 0 < \alpha < 1 \quad (3)$$

$x_N$  is state where the object led considers normal. Constant value  $\alpha$  is the parameter adjustment of the current state to the desired state.

One of the opportunities is to treat equal  $x_N$  with  $\bar{x}$  - the state average. In this case, equation (3) has the form

$$x_t^e = x_{t-1} + \alpha(x - x_{t-1}) \quad 0 < \alpha < 1 \quad (4)$$

The initial problem is expressed by the system of equations

$$\left\{ \begin{array}{l} D_t = a + b * x_t \\ R_t = a_1 - b_1 \left[ x_{t-1} + \alpha(x - x_{t-1}) \right] \\ D_t = R_t \end{array} \right\} \quad (5)$$

$D_t$  - the desired state;  $a, b$  - constants,  $x_t$  - state of system at the time  $t$ .

Adjusting the actual state to the desired state is achieved by the adjustment of coefficient  $\alpha$ . Substituting first and second in the third equation we have:

$$a + b * x_t = a_1 + b_1 * x_{t-1} + b_1 \alpha x - b_1 \alpha x_{t-1}, \quad (6)$$

$$b x_t - (b_1 - b_1 \alpha) x_{t-1} = a_1 - a + b_1 \alpha x. \quad (7)$$

Where to get

$$b x_t - b_1 (1 - \alpha) x_{t-1} = a_1 - a + b_1 \alpha \bar{x} \quad (8)$$

This is the basic equation of dynamic feedback loop (in finite differences).

The general solution of the inhomogeneous equation (8) consists in the sum of the solution of homogeneous equation (9)

$$b x_t - b_1 (1 - \alpha) x_{t-1} = 0 \quad (9)$$

with a particular solution to the inhomogeneous equation.

The general solution of the inhomogeneous equation is of the form

$$x_t = A \left[ \frac{b_1 (1 - \alpha)}{b} \right]^t \quad (10)$$

a particular solution to the inhomogeneous equation (8) is

$$\bar{x} = \frac{a_1 - a + b_1 \alpha \bar{x}}{b - b_1 + b_1 \alpha}, \quad (11)$$

where  $\bar{x}$  decisional balance which means the strategy decision.

The general solution of the equation of dynamic feedback loop is shaped

$$x_t = A \left[ \frac{b_1 (1 - \alpha)}{b} \right]^t + \bar{x} \quad (12)$$

if known  $x_0$  can be determined constant  $A$ :

$$A = (x_0 - \bar{x}) \quad (13)$$

and complete solution of equation (8)

$$x_t = (x_0 - \bar{x}) \left[ \frac{b_1(1-\alpha)}{b} \right]^t + \bar{x} \quad (14)$$

The stability condition allows write relationship

$$|b_1(1-\alpha)| < |b_1| \quad (15)$$

It is clear that  $b_1(1-\alpha)$  is smaller than  $b_1$  and  $\alpha$  is always below par.

In this model, the dynamic oscillatory path remains convergent, the convergence is provided by the relationship

$$\left| \frac{b_1(1-\alpha)}{b} \right| < \left| \frac{b_1}{b} \right| < 1. \quad (16)$$

Type oscillations of the model is convergent, since the condition of equation (16) is always true, because  $\alpha > 0$ .

Oscillator explosive character in this model is slower because  $\alpha$  parameter is less than 1.

And the  $1 - \alpha$  is lower, so the model requires condition

$$|b_1(1-\alpha)| \leq |b|, \text{ i. e. } |b_1| > |b|. \quad (17)$$

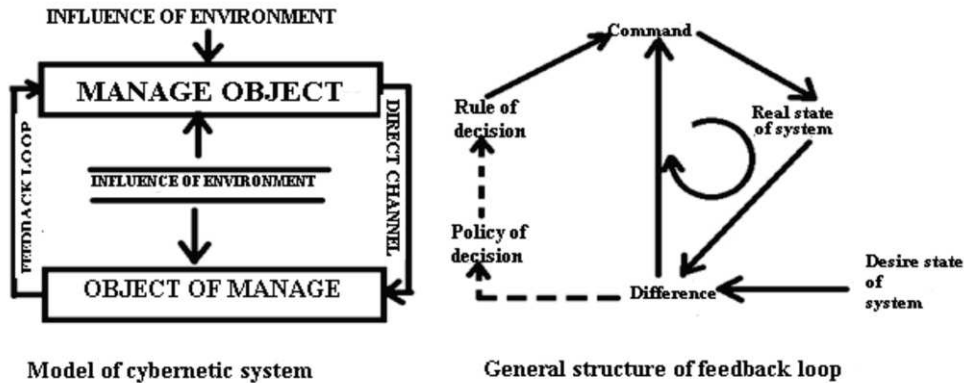
The necessity. Whether the alliance is stable. We must prove that component systems (party alliance) are contradictory programs / actions are consistent with national and alliance ring (metasystem [6]) is insulated on the outside. We use definitions of steady and stable system.

Defined 6 is a system steady rate for which input sizes (input) and output (output) are invariant over time.

According to the definition 7 [4 aut.] Systems that can achieve a stable systems are called steady.

Let us examine how the system will work alliance, made up of three parties P1 P2 P3. If the alliance is stable, then Programs / parties P1 P2 P3 actions are consistent with IN, are compatible with each other and there are no sentences M such that for all propositions  $M \sim M$  can not be established truth value, confirmed by all parties of the alliance. If the alliance is stable, however, the operation appears a sentence N so that neither for nor for N and  $\sim N$  in  $P1 \cup P2 \cup P3$  not have truth values, then using Not isolated Pk party, in  $P1 \cup P2 \cup P3 \cup Pk$  the propositions N and  $\sim N$  have values of truth.



**Figure 2. The model of cybernetic system and structure of feedback [4], [5]**

If the alliance is stable when subject leader and the led interact like elements interconnected and interdependent, that form a party system. The statement about neizolarea on the outside in the fact that if the system generates sentences shares / L, that it can not be established the truth of propositions / actions L and  $\sim L$  then because the alliance is stable, there is a system (party) Pk so that the meeting can be established alliance  $\cup Pk$  that can establish true/false value of the propozitions/actions L and  $\sim L$ . the truth of propositions / L and  $\sim L$  shares. For example  $\sim L$ : The office of President shall not share; L: The office of President is shared. Whether Pk - President of European People's Party. In alianse  $\cup Pk$  is the solution: the parties choose an expert council, which in three months determine the truth of propositions L and  $\sim L$ . Therefore, I assumed that the alliance is stable and we have proved that the alliance parties are contradictory and programs, consistent with national and alliance ring is insulated on the outside.

Sufficiency. It is given that component systems (party alliance) are contradictory within the alliance, programs / actions are consistent with national and alliance ring (metasystem) is insulated on the outside. We must demonstrate that the alliance is stable.

If the alliance parties are contradictory, they draw / performed sentences / action type L and  $\sim L$ , who really values accepted by all parties of the alliance. The fact that these propositions / actions are consistent with IN (national ring) confirm their legality and sustainability. If the parties in the alliance are insulated on the outside, the appearance of a shock (L and  $\sim L$  can not have truth values) alliance parties will identify at least one external linkages among Ek such that in alianse Ek - L common value proposition truth. But this also means that the alliance is stable.

Reverse connection Law, formulated by Norbert Wiener says that "any cybernetic system has at least one feedback loop (reverse connection)". In reality, any system can be part of another system more complex.

**Theorem 3.** A system / party is non-contradictory if the program's activity is consistent with national ring (national belt) of the country and is built on true, current and complete information.



Demonstration. It is given a system / party  $S1 / P1$  non-contradictory. We must show that this party must be consistent with national ring and be built based on the information true, current and complete.

If the program / actions party  $P_i$  are not consistent with the ring nationally, that contain propositions  $L$  and  $\sim L$  truth which can not be determined in relation but then the actions that arise from propositions  $L$  and  $\sim L$  are illegal and make the alliance system destructive as defined 6. therefore, the program /  $P_i$  party's actions must be consistent with national ring.

1. If the program / actions party  $P_i$  is built on false information, then it contravenes the principle of logic and principle of sufficient reason can not be accepted.
2. If the program / actions party  $P_i$  is built on outdated information, it is contrary to the national ring - so incompetent, irresponsible and can not be accepted.
3. If the program / actions party  $P_i$  is built on incomplete information when it occurs missing information errors in policy decisions and the choice of system status and inadequate regulation decision contravenes the principle of sufficient reason if one turns - and untrue information can not be accepted.
4. If information is made based on untrue, not current or incomplete, then the consequences are that in cases 1, 2, 3 - can not be accepted.

Therefore program /  $P_i$  necessarily party's actions should be built based on the information true, current and complete.  $P_i, I = \{1,2,3\}$

**Theorem 4.** A system / party is not insulated on the outside, if there is at least one other system / party system / party is connected via information given true, current and complete.

Demonstration.

Whether  $P_i, i = \{1,2,3\}$  a party that is not insulated on the outside. Then there is another party  $P_k$  such that there is at least one sentence /  $L$  action, shared these parties.

If common sentences were not true, then they can be called gossip joint activities and joint work - not within the national ring and can not be accepted. So connecting to another party / external system can only be achieved based on real information.

If common sentences were not present, then so common activities include criteria of incompetence and joint work - criteria inefficient waste of resources and not within the national ring. So, the alliance built on inadequate information can not be accepted. So connecting to another party / external system can only be achieved based on current information.

If common sentences were not complete, then joint activities based on them can be called amateurism and joint work - imitation inefficient - not within the national ring and can not be accepted. They will be corrected at each filling, which is not consistent European policy for sustainable solutions - long life. So connecting to another party / external system can only be achieved on the basis of complete information.

Connecting to a system based on abuse of managers, leaders, departments, organizations, State (information untrue, not current, incomplete) and conflicts of interest are not within the national ring and can not be accepted.

#### 4. Electoral/administrative systems unstable

Definition 9 [6 of auth.]. System with at least a destructive purpose is called destructive system.

Definition 10 [7 of auth.]. The system, which has all constructive purposes is called constructive system.

**Theorem 5.** The constructive system is based on civilization, culture, science - and supports innovative information true, current and complete, consistent with national ring. It proves the theorem 3.

**Theorem 6.** The organization comprising at least one destructive system is necessarily destructive.

If an organization O1 SD1 contains a destructive system, this system tends to achieve the purpose for any occasion. The purpose of a system is achieved by the choice of policy decisions Rule decision feedback loop.

If the system time renounce destructive destructive purpose, then it becomes neutral or constructive system and is not the subject of this theorem. So we examine SD2 destructive system that does not give up destructive purposes. The essence of this system lies in the fact that he will appeal the balance functioning of the organization. The techniques and tactics of attack can be varied, depending on the capabilities destructive leader. Thorough analyzes based on memorized environment may allow to detect cyber destabilize the balance of the system driving the organization / system.

The initial order will be substantiated constructive. If the system is encapsulated object destructive drive, then the realization of orders, possibly from the first result will be unexpected, shocking. If the system is encapsulated destructive decision-making system, the deviation can occur even in making the first decision. If the system is encapsulated in defining destructive expected result, then this object / situation, possibly the first result will be unexpected. There will be attempts to change the negative feedback loop of positive or vice versa or liquidation feedback loop.

Essential: if the system is not detected and neutralized destructive in real time, then it has increased and become a habit and neutralizing's is often more complicated - the whole organization becomes destructive.

Anatomy damage. Feedback loops positive and negative feedback loops show the behavior of a sense that the same variable from changing the contour of a flow loop after it has taken in its entirety. So if X is a variable which is in a feedback loop, it will be positive if an increase in X's entry into the loop will increase by X after checking the entire loop. But if an increase of X at the entrance to the loop causes further decrease of X, then the feedback loop is negative.

Destructive system of organization will influence other systems and feedback loops to destruction if the organization does not react urgently and do not correct the situation in the system and organization.

**Theorem 7.** Parties elected to parliament not allowed to put additional conditions on the program for which voters voted. Additional conditions may be added to GP with vote of all the parties elected to parliament.

Demonstration. Suppose the contrary, that the parties elected to parliament were allowed to set additional conditions to the party program (with PL). If states parties sentences that differ from those voters who voted for or neglect propositions formulated

in the party program, which correspond, then these parties 'voters are ', according to art. 39 hp and violate the rights of voters administration, democracy, and candidates likely to be suspected of usurping power - that will be punished criminally for "usurpation of state power", "usurpation of official qualities", "false declarations" "treason" etc. But then they can not be members of Parliament. I assumed that the parliament elected parties can put any additional conditions to the party program and come to the counter.

Therefore, the deputies have no right to remove any sentences of the program in negotiating with other parties, nor add new sentences, which were not rated by voters.

For example, the leadership of the democratic party has no right to ask who should be provided to the government (without PL) because the PDM software for voters who voted is not this sentence. So adding a sentence to parliament / coalition is abuse of trust of voters, breach of democratic principles, not within the IN and the PDM discredited as a political party.

Reverse connection Law, formulated by Norbert Wiener says that "any cybernetic system has at least one feedback loop (reverse connection)".

**Theorem 8.** The degeneration of parliament. If the organization does not contain any feedback loop, it is necessarily destructive.

The proof of the theory of cybernetics, developed by Norbert Wiener, in particular, the Law reverse connection, that any cybernetic system applied in cars, society, humans and animals "have at least one loop feedback (reverse connection)", which serves management. Cybernetic system is the cornerstone of feedback loop. Without feedback loop system degenerates into isolated components.

**Theorem 9.** Parliament as a system. Any constructive parliament can be amplified by constructive system. Any parliament that does not fulfill the functions of the system degenerated into destructive competitive components.

Demonstration.

Parliament consists of MPs elected by the citizens of the country on election day, representing the interests of voters. The interests of voters were divided by party, which achieved a certain ordering deputies, so long as the parties' interests do not contradict the interests of the country, the provisions of national ring (IN). If the parties' interests are subordinate IN, where parties receive a coefficient  $k$  ( $6 \leq k \leq 100$ ), which takes into account every voting for solving one or another problem. If interests against the interests of one party or another country, the parliament has the right to bring the matter before the Constitutional Court on the constitutionality of that party (art. 135 P1H). Parliament obtained after landing parties forms a constructive system unconstitutional.

**Theorem 10.** Landing in parliament. A stable parliament may not include the most unbearable (cf. [7]). Ladder for landing of honor in parliament (top management) is autodemission (or insistence of resignation from voters).

The most unbearable (tank, sniper site, Grenade, Erudite, careerist, Ever-of-agreement, I then man anymore, man-no, Weep):

Tank - a confrontational person, directed-aggressive, brutal, quarrelsome, which are characterized by unrestrained behavior, arrogant. [7, p. 13]

sniper - a brutal response, a sarcastic remark or a tribute to gaze over his head, but sniper site will compel you look bad - this is "the horse" his favorite. [7, pp. 14]

Grenade - at first everything seems to be quiet. But spontaneously exploding

grenade insulting assistance without any visible cause it. This anger is in no way connected with what is happening. [7, pp. 15]

Scholar - rare person doubts and do not suffer to be told that I was right. But when he states that he admitted the mistake, he smugly defines what it demonstrates that all are guilty ... Your. [7, pp. 16]

Careerists - not being able to make a good impression lasting a while careerists can fool others, to be in sight. [7, pp. 17]

Ever-of-agreement - it promises and promises, forgetting that it is not able to fulfill everything that was seized. And the ever-agreement say yes until I have time even for his own work. And then he begins to rebel against the people around him. [7, pp. 18]

Do then - postponing a decision from day to day, hoping that the solution will come by itself. But the solution usually comes naturally when no longer needed. [7, pp. 19]

Man anymore - no soul to speak with him can not, nor shut up together ... [7, p. 20]

Man-no. Who will bring despair around, you will miss the last hope and consume a great idea with a word? Of course he is, man soft with soft manners, man-no. The man, who has wasted all the forces fighting for disappointment, despair and hopelessness ... [7, p. 21]

Weep - feels helpless and oppressed by unjust world around them. He dreams of perfection, but nobody and nothing responds's ideal. Complaints and requests to not love solitude - is tirajează to others. But even problem-solving proposals were not accepted by the complaint - considers you an interlocutor anything. [7, pp. 22].

Example. (L): The state language is Romanian; (~ L): The state language is Romanian.

Demonstration.

Because the system does not meet the condition of persons referred to as non-contradictory on the inside. Therefore, if the structure of any system allowed people so they destabilize it. Destabilization of a system / party needed to bring destabilization alliance. Last necessary bring serious consequences for the entire country. That is why people require contradictory landing in parliament. Landing in parliament is carried out under the right of every citizen to defense, combined with the freedom of association and the right to petition or the right to strike rallies. But under the right of parliament to exist, which can be liquidated because of these people.

## 5. Optimizations in the electoral/administrative system

**Theorem 11.** The optimal number of parties and programs in a country parties is 2-3 with programs compatible with IN and intersecting.

Demonstration.

Completing parties are sources of parliament representing the interests of voters. It is not practical to have a single party in the country - it becomes a monopoly, which contradicts the anti-monopoly law.

The number of games is determined by two conditions: to ensure a majority of 50% + 1 votes in parliament; ensuring 2/3 vote in parliament for strategic decisions, for example, changing the Constitution. At the same time party programs must be compatible with NR (National Ring).

These restrictions where more than 30 games are very complex: each party

would get about 3% of voters, and to ensure a 61% (3/5) requires constituted alliance of 21 parties! Practice shows that three alliance parties can not but 21 more so!

From the point of view of a majority stake (50% + 1) is optimal parliament from 2 matches. One of them will be the majority, the other - in opposition. But 61% is more difficult to format. However, competent personalities of the country are divided into two parties and personalities in the party concentration is about 20 times as high as in the case of 40 matches.

From the viewpoint of securing the 61% is more convenient parliament in 3 games (2 leadership and one in opposition). Alliance of two parties would provide 50% + 1, and 61%. However, competent personalities of the country are divided into three parties and personalities in the party concentration is about 13 times higher than in the case of 40 matches.

Disadvantage: It is necessary alliance of the two parties!

Alliance of several parties may be allowed only in case the parties have programs with small differences between them. But safety is small alliances.

Proceeding from the above, are optimal parliaments of 2 or 3 parties (including 1 one of them - in opposition).

**Theorem 12.** About legal justice. RM necessarily justice must be competent (not immovable as now), independently and impartially.

Demonstration. Moldovan laws necessarily must be in accordance with international law. Art. 14 of the International Covenant on Social and Political Rights provides that every citizen has the right to fair and public examination of civil and criminal cases "OF A COMPETENT COURT, independent and impartial". The contradiction of the Constitution art. 116 (1): Court judges are independent, impartial and irremovable (N.A. irremovable = that can not be moved or removed; Incompetent + irremovable = judicial torture). Because according to art. 4 (2) of the Constitution: "If there are discrepancies between pacts and treaties on fundamental human rights to which Moldova is a party and its domestic laws, international regulations have priority" examination of cases in the Republic of Moldova must be exercised "DE A competent judges, independent and impartial ". According to art. 7 of the Constitution "the Constitution is the supreme law" and falling under article 14 aforementioned. Therefore, because of the contradiction between art. 116 (1) of the Constitution and art. 14 of the International Covenant on Social and Political Rights, art. 116 of the Constitution should be amended; the phrase "independent, impartial and irremovable under the law" be replaced by the phrase "competent, independent and impartial, according to the International Covenant on social and political rights".

**Theorem 13.** About justice immovable. Justice that is impartial, independent and irremovable DESTRUCTIVE meets the requirements of an organization.

Demonstration. Let us examine the conditions of the theorem.

Competent (condition is necessary but sufficient ni-i) - which has the ability to do something that is competent. Competence is the first prerequisite of international law on justice.

Impartial (condition is necessary but sufficient ni-i) - making fair assessments; unbiased, objective law.

Independent (condition is necessary but sufficient ni-i) - which does not depend

on anyone, free, autonomous (but not necessarily legal).

Irremovable (condition is neither necessary nor sufficient) - that can not be moved or removed.

Incompetent (condition is neither necessary nor sufficient) - which does not have the ability to do justice, which is not competent.

We will examine possible cases of combinations of these judicial qualities:

Impartial, independent, irremovable and competent enforcement jurisdiction - where sufficient but not necessary.

Impartial, independent, irremovable and competent, but do not apply the power - contrary to art. 56 Constitution (Article is violated), art. 14 of the International Covenant on social and political rights - combination neither necessary nor sufficient.

Impartial, independent, irremovable and competent, but apply selectively power - contrary to art. 56 Constitution (Article is violated), article 14 of the International Covenant on social and political rights - combination neither necessary nor sufficient.

Impartial, independent, irremovable and incompetent - contradicts art. 56 Constitution (Article is violated), art. 14 of the International Covenant on social and political rights - combination neither necessary nor sufficient.

Therefore, the judiciary is impartial, independent and irremovable 75% - 85% cases violates the Constitution and art. 14 International Covenant on social and political rights, that meets the organization DESTRUCTIVE.

A special role in the information infrastructure of social processes plays set of legal rules, procedures of law, judicial practice, taken as a model for future decisions. These components of Moldovan legal process necessarily should be a system of systems (metasistem) that for each legal situation provides a single true solution. It is achieved by building a constructive formal system. Suder was general solution of Kurt Gödel.

The current set of legal norms of the Republic of Moldova is contradictory .  
Examples.

- 1) For example, in art. 20 (2) CPC RM states: " Any interference in the work of law is inadmissible and entail liability prescribed by law". In art. 303 (1) CP RM mentions that "punishments in order to prevent multilateral examination , fully and objectively concrete case or to obtain a judgment of court is punishable by a fine illegal 200-500..." In art. 303 ( 2) CPRM mentions that: interference in the work of law is inadmissible if ..."research in order to prevent rapid, complete and objective criminal case is punishable by a fine 350 ... ". In other cases, interference in the work of law is possible: to find the true, to add the prove in case, in others situations.
- 2) Contradiction of art. 426 (3) CPC RM with art. 23 (4) CC RM. "We inform you that according to art. 426 paragraph ( 3) CPC will review the appeal without summoning the parties. Civilian use capacity is according to art. 19 CC RM the ability to have civil rights and obligations, ie to be the subject of civil law, the beautiful as such civil relations. Nobody can not be restricted in its ability to use. Exercise capacity is according to art. 18 CC RM suitability of the person to enter one civil legal acts. According to art. 23 (4) CC RM decision of Court of Appeal of 05.10.2015 on case no. 2r- 562/15 is null.



- 3) Art. 116 (1) of the Constitution : "Judges are impartial, irremovable and independent in conformity to law " (Constitution, the supreme law is the law dependent on the bottom that can easily change) "competent, independent and impartial"; according to art. 4 (2) of the Constitution, art. 116 ( 1) of the Constitution is null !!! Proposal for art. 116 (1) of the Constitution: " Judges are professionally competent , independent and impartial".
- 4) The contradiction of art. 426 paragraph (3) RM CPC and art. 26 of Constitution. Art . 26 of the Constitution "right to defense" provides "1. The right to defense is guaranteed 2. Everyone has the right to act independently through legitimate means to an infringement of his rights and freedoms". The prohibition to participate in the trial have been deprived of the right of defense (" the right to respond independently by legitimate means, (the violation of rights and freedoms" ) and the right of self-defense (art. 13 CC RM) " without immediate action there is a danger that the realization of the right to be impossible or substantially for example, in case 2a- 2510/2005 have been deprived of the right to give his recusing mr Pruteanu V. and ms L. Popova , which he have appropriated illegally ap. 95 Street . I. Vieru 16 , mun. Chisinau. According to art. 7 "The Constitution as the Supreme Law " of the Constitution : "No law and no other legal act contrary to the Constitution has legal power".
- 5) A violation of Article 20 of the Constitution "access to justice " , that " Everyone has the right to obtain effective protection from competent courts against". The right to " obtain effective " includes : satisfaction - feeling of contentment; satisfaction - giving prevailed; actual - real, true; " Effective remedy " means "to give prevailed to obtain satisfaction really. According to art. 7 of the Constitution "The Constitution as the Supreme Law: No law or other legal act that contravenes the Constitution has no legal power.
- 6) Very dangerous the local, departmental and corporate groups with interests (local, departmental or corporate) prevail the national interest. But these criminal groups are "bypassed" the judges illegally by neglecting art. 53 (3), art. 17 European Convention on Human Rights, art. 55 and 56 of the Constitution.

Therefore, the current set of components justice Moldova (CPC RM, CPP RM, CC RM, CPRM, practice, etc.) , are inconsistent with the Constitution and international legal law. Searches the decision tree allows for double or multiple solutions (conjectured by taxpayers, ensuring judges' salaries increased significantly as "selective justice"); vide cycles; zenon apories; endless cycles; increase in geometric progression in the number of files needed to restore justice/ righteousness; sofizme legal, and even open murder.

Setting all contradictions, included as components of justice current of Republic of Moldova (RM CPC, CPC RM , RM CC , CP RM , practice etc. ) requires special research by logicians, matematicians, cyberneticians, managers and others.

**Theorem.** Solution double / multiple in justice is a non justice.

Demonstration. Whether we have a specific legal situation relating to natural persons A in the process with individual B. Sie that at the same time and under the same R were obtained two different solutions (" Selective") S1 and S2.  $A R B = S1$  and  $A R B = S2$ .  $S1 \neq S2$ . A third possibility is excluded.  $S1 = S2$ . I assumed that  $S1 \neq S2$  and  $S1 =$



S2 have reached. The contradiction proves the theorem.

There are numerous "ways of obtaining "solutions double / multiple or lack of solutions: endless cycles of lack of access to justice, aporias of Zenon, legal Chinese walls, the big number of mistakes of judgments and big number of files to restore justice in justice, breach of the principle of identity, infringement of noncontradiction, violation of third party principality ruled, infringement of sufficiently basis and others.

Central definition. Cybernetic system is called all objects connected to one another, capable of delivery / collection, storage, information processing and exchange of information. [Slovari po kibernetike red bridge. V. S. Mihalevicea, str. 265]

Central theorem. The office is led cyber then and only then, when the loop (loops) feedback (the) system operates in real time.

The need. Whether social system is driven. We must show that loop / feedback loops of works in real time.

Demonstration. If the social system is headed, then it necessarily has at least one feedback loop. Suppose that the feedback loop reacts only on some events in the system, then the management will take place only if their other events are free driving; then the system is not driven; result contradicts the assumption that the system is run. So if the feedback loop reacts to all events in the system, then the management will take place for all system events. But this means that the system works in real time.

Sufficiency. Whether loop / feedback loops of a social system operates in real time. We must show that social cybernetic system is driven. The system operates in real time, ie any change in the variable feedback loop exists government strategy and decision rule for decision. As defined cybernetic system, that the system is run.

Example. Cyber social system - the country's parliament, which is elected every four years, during which the system components interacting in real time with the country based on national ring, degrade components isolated destructive antagonistic.

In other countries, they were admitted intuitive institute honorary resignation, the resignation of the killings, crying on television as excuses to voters, out massive voter in the street etc. and so on in many countries these events practically ensures loop / feedback loops of a social system in real time.

In Moldova it is necessary to replace the measures "resignate" criminal responsibility with other events, for example, voting by electronic systems for landing in parliament, a government, one person, party or group of deputies.

## 6. Conclusions and recommendations

1. Theorem 1. A system is stable if and only if it is non-contradictory on the inside and on the outside not isolated.

2. Theorem 2. An Alliance (metasystem [6]) government is stable then and only then, when component systems (party alliance) am contradictory programs / actions are consistent with national and alliance ring (metasystem [6]), is insulated on the outside the party / parties in opposition and stable political parties in the world.

3. The basic equation of dynamic feedback loop (in finite differences) of system (parliament RM) with goal (addition to EU) can have the

$$bx_t - b_1(1 - \alpha)x_{t-1} = a_1 - a + b_1\alpha\bar{x} \quad (8)$$

4. Type of the oscillation of model is convergent, if

$$|b_1(1-\alpha)| \leq |b| \quad \text{i. e.} \quad |b_1| > |b|$$

5. Theorem 3. A system / party is non-contradictory if the program's activity is consistent with national ring (national belt) of the country and is built on true, current and complete information.

6. Theorem 4. A system / party is not insulated on the outside, if there is at least one other system / party system / party is connected via information given true, current and complete.

7. Theorem 5. The constructive system is based on civilization, culture, science - and supports innovative information true, current and complete, consistent with national ring. It proves the theorem 3.

5. Theorem 6. The organization comprising at least one destructive system is necessarily destructive.

6. Theorem 7. Parties elected to parliament not allowed to put additional conditions on the program for which voters voted. Additional conditions may be added to GP with vote of all the parties elected to parliament.

7. Theorem 8. The degeneration of parliament. If the organization does not contain any feedback loop, it is necessarily destructive.

8. Theorem 9. Parliament as a system. Any constructive parliament can be amplified by constructive system. Any parliament that does not fulfill the functions of the system degenerated into a destructive competitive components.

9. Theorem 10. Landing in parliament. A stable parliament may not include the most unbearable ([7]). Ladder for landing of honor in parliament (top management) is autodemission (or insistence of resignation from voters). The most unbearable include: tank, sniper, Grenade, Erudite, careerist, Ever-of-agreement, I then man anymore, man-no, Weep).

10. Theorem 11. The optimal number of parties and programs in a country parties is 2-3 with programs compatible with NR and intersecting.

11. Theorem 12. About legal justice. RM necessarily justice must be competent (not immovable as now), independently and impartially.

12. Theorem 13. About justice immovable. Justice that is impartial, independent and irremovable DESTRUCTIVE meets the requirements of an organization.

13. Theorem 14. Double/multiple solution in justice is non-justice. (is not compatible with NR).

14. Central theorem. The office is led cyber then and only then, when the loop (loops) feedback (the) system operates in real time.

### **Bibliography:**

Mic dicționar al limbii române, Editura enciclopedică, București, 1997

Н. М. Соломатин Информационные семантические системы, М., ВШ, 1989

Constituția Republicii Moldova, Farmec-Lux, 2014

Норберт Винер Кибернетика или управление и связь в животном и машине, М, Сов. Радио, 1968, 215 стр.

E. Scarlat Introducere în cibernetica economică, București, 1996

- Д. Бэлэнел О некоторых закономерностях, действующих при использовании метасистемы (образования) в научных (педагогических ) исследованиях// Teoria și practica administrării publice, Materiale ale conferinței internaționale științifico-practice, 21 mai, Chișinău, 2010, pag. 297-303
- Dr. Rick Brinkman, Dr. Rick Kirchner Dealing with people You Can't Stand, McGraw-Hill Inc., 1997
- Efim Mohorea Introducere în logică, ed. Arc, Chișinău, 2008