The Main Dynamic Characteristics of Autocratic Systems

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Abstract
The autocratic system is the most common way of function of societies and their various organizations and institutions. The current global recession and economical crisis is bringing a great deal of attention to the causes and mechanisms of these phenomena. In this work we present the abstract-syntactic model of the main dynamic functions of autocratic systems. This model shows the general pathways of development of societies and reflects the current reality very accurately.
Keywords: autocracy, cycle of development, steering

1 Introduction

Social sciences are still characterized by differential and even opposing interpretation and assessment of social phenomena. There are two main reasons for these differences. The first one is the natural linguistic way of human understanding, which strictly relies on the simultaneous use of the semantic and syntactic models. The second one is due to the social sciences lacking an abstract-syntactic model of the function of society that is well constructed and widely accepted. As such, metaphors are used in analyses of social phenomena instead of a syntactic model. These metaphors are most often derived from subjective experiences and beliefs resulting in fragmented approach to social issues and problems. For example, metaphors of liberalism, conservatism, socialism, revolution, religion or others can represent different contemporary processes to different individuals or groups of people. However, the reality shows that ideologies based on metaphors and introduced to practice lead to serious social crises. The evident contemporary examples of this are the Marxist and Neo-liberal ideologies.

This work presents the outline of an abstract-syntactic model of cyclical functioning of an autocratic system and its developmental dynamics. It shows that crisis is one of many stages of any basic developmental cycle of a society, which is not purposefully steered in the anticipative way. In the anticipative steering, the most important processes are correctly alternating changes of the trajectory of a system growth from open trajectory into a closed one and vice versa. This was elaborated as the result of our long-standing research into social systems as well as into literature attempting to model socio-economic and political processes. The starting point to this outline is the Linguistic Theory of Systems Growth.

1 Processes of Growth and their Basic Dynamics

According to the Linguistic Theory of Systems Growth (Turkiewicz. and Turkiewicz 2006), the elementary growth can be represented in the forms of $x=x_0\pm\Delta x$ and $x=x_0\pm dx$

for continuous processes, where 'x' is the quantity of a parameter of an element expressed by a number, 'x_0' is the initial quantity and Δx (dx) is the increment of growth. This increment is the quantitative and elementary model of activity of growth or briefly the model of activity (ΔA or dA).

Studying general dynamic properties of intensity of growth or changes, one can distinguish the following most important types of elementary, continuous processes and their traits in nature:

1. Fixed and independent processes characterized by zero intensity $dA_s/dx=0$ ($dA_s/dt=0$) and constant activity $A_s=C$;
2. Non-progressive and changeable processes with characteristics of $dA_s/dx=\pm\beta_x$ ($dA_s/dt=\pm\beta$) and $A_s(x)=\pm\beta_x x+C$ [$A_s(t)=\pm\beta t+C$], where β_x and β are constant coefficients and 'C' is a constant value;
3. Progressive independent and dependent processes characterized by the intensity $dA_s/dx=\pm\alpha_{xy}y$ and activities $A_s=\pm\alpha_{xy}xy+C$, $dA_s/dx=\pm\alpha_x x$ and $A_s=\pm\alpha_x x^2/2+C$ [$A_s(t)=\pm\alpha t^2/2+C$], where 'x' and 'y' are relatively independent elements, α_x, αy, α_{xy} and α are constant coefficients and 'C' is a constant value.
4. Combinations of signs 'plus' and 'minus' (+, -) of the elementary activities appropriately model relations of cooperation and competition;
5. Innovation is the change of factors of growth.

For a finite system 'S' that has a quantity 'n' of elements 'x_i', its total activity is expressed by the following equations:

$$A_s=\sum_k\sum_i[\sum_j(\pm\alpha_{kij}x_{ki}x_{kj})\pm\beta_{ki}x_{ki}]+C \quad \text{and} \quad A_s(t)=(\sum_k\sum_i\pm\alpha_{ki})t^2\pm(\sum_k\sum_i\pm\beta_{ki})t+C,$$

where 'x_i' represents a quantitative social and/or economic dimension of people and their organizations, α_{kij}, α_{ki}, β_{ki} are constant coefficients of progressive and non-progressive activities respectively, the index $k=1,2,\ldots,r$ determines various agents (factors) of growth, C is a constant value, 't' is time, indexes $i,j\in\{1,2,\ldots,n\}$, and for $i=j$, $\alpha_{kij}x_{ki}x_{kj}=\alpha_{ki}x^2_{ki}$. The second expression $A_s(t)$ is the transformation of multivariable function of the total activity A_s into function depending on time and distinguishing progressive, non-progressive and non-variable activities. As the result of this transformation, the function A_s is reduced to simple parabolic function $A_s(t)$.

For a system whose elements are characterized by diverse degrees of progressive activities, the total activity of a system can be generalized to the following expression:

$$A_{ps}(t)=\pm(\Sigma\Sigma\pm\alpha_{k0})t^n\pm(\Sigma\Sigma\pm\alpha_{k1})t^{n-1}\pm(\Sigma\Sigma\pm\alpha_{k2})t^{n-2}\pm\alpha_{k3})t^{n-3}\pm\ldots\pm(\Sigma\Sigma\pm\alpha_{kn-1})t\pm(\Sigma\Sigma\pm\alpha_{kn}).$$

This is the general dynamic and syntactic model of a system. When this model is characterized by an appropriate level and/or distribution of the cooperation relations, it reflects an autocratic (monotonic) system focused on hierarchic autocracy. But when it is characterized by an appropriate level and/or distribution of the competition relations, it reflects the system called pluralistic (revolving or periodical). In the case, when it is reduced to the function of activity $A_s(t)$, it reflects an autocratic system focused on its elementary characteristics (Turkiewicz and Turkiewicz 2008).

2 Limitations of Development of an Autocratic System

The most basic and important element of any autocratic system is a field of force that keeps its function as a whole. This field imposes certain rules of behaviour on the elements of a system as well as on the elements of its surroundings. Every field of force functions due to formation of various disproportions among the elements of a system. In a social system, disproportions are strictly related to organizations and institutions, which are managed by the autocratic elite and therefore the magnitude of disproportions is a measure of autocracy. In extreme cases of autocracy, the most important organizations become police and army and the most important elite is the absolute ruler or dictator. With respect to the expression of a total system activity $A_s(t)=\pm(\Sigma\Sigma\pm\alpha_{ki})t^2\pm(\Sigma\Sigma\pm\beta_{ki})t+C$, the most important disproportion in an autocratic system is the difference between progressive $[\pm(\Sigma\Sigma\pm\alpha_{ki})t^2]$ and non-progressive $[\pm(\Sigma\Sigma\pm\beta_{ki})t]$ growth of system elements of a society and organizations. Every social element is characterized by the coefficient of non-progressive growth $\beta_{ki}\neq0$, but autocratic elite and organizations are characterized by the coefficient of progressive growth $\alpha_{ki}\neq0$. However, the most universal and important rule of behaviour of systems and their elements is the formation of relations of cooperation and competition between them.

Because all real social systems are finite systems, therefore they are limited in various ways. The most essential and universal limitations of any material system and their elements are:

1) size of factors of growth,
2) size and magnitude of activity,
3) disproportions between elements and processes,
4) resistance of a system and elements to a certain maximal and minimal level of activity.

2.1 Factors of Growth

The most strong and rigid limitation of development of any system is the size of factors of its growth. The strict logic of this limitation is evident in the following universal and simple example of processes of system growth and disintegration.

Assume that a resource of a certain main factor of growth has 'q_0' elements or units at time 't_0' and it is subject to the decay process characterized by the expression $q=q_0\exp(-\lambda t)$. This decay process allows for growth of a system $S_1(x)$ according to the function $x_g=\eta q_0[1-\exp(-\lambda t)]$, which is subject to the disintegration (decay) process $\exp(-\lambda t)$. As a result of this, the curve of growth of the system $S_1(x)$ takes the following form $x_1(t)=\eta q_0\exp(-\lambda t)[1-\exp(-\lambda t)]$. In these mathematical expressions $\eta<0$ is a coefficient of use of the factor of growth and for simplification of calculation of expression of growth, values of the coefficients 'η' and 'λ' are adequately the same in all systems.

Figure 1 presents the shape of the curve of growth of system $S_1(x)$ and the curves of growth of systems $S_2(x)$ and $S_3(x)$, for which growth depends on disintegrating processes of systems $S_1(x)$ and $S_2(x)$ respectively. The growth curves of systems $S_2(x)$

and $S_3(x)$ are denoted by the following expressions $x_2(t)=\eta^2 q_0 \exp[-\lambda(t-t_2)]\{1-\exp[-\lambda(t-t_2)]\}$ [$x_2(t)=0$ for $t\leq t_2$] and $x_3(t)=\eta^3 q_0 \exp[-\lambda(t-t_3)]\{1-\exp[-\lambda(t-t_3)]\}$ [$x_3(t)=0$ for $t\leq t_3$]. Figure 1 shows a series of three interdependent systems, but in reality it can be a series of the number n>3 of systems. This interdependency of such systems or elements relies on that their existence and/or growth are conditioned on disintegration of an appropriate system or some systems. But there can also be the opposite relation in which disintegration of a system is conditional on existence and/or growth of other systems.

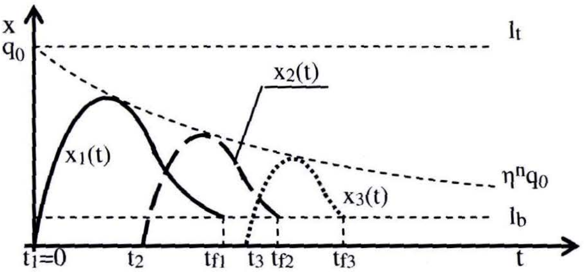

Figure 1 The shape of development curves of systems $S_1(x)$, $S_2(x)$ and $S_3(x)$

The most important logical conclusion evident from the presented analysis is that every development of a real system demonstrates two different stages due to the limitation of factors of growth. The first stage is characterized by dominant processes occurring both in the system as well as its surroundings. These processes integrate the elements and increase the system. However, the second stage is characterized by processes which disintegrate the elements and hence decrease the system. If we consider the two stages of development of a system using the notions of force, cooperation and competition, it can be concluded that the stage of system increase is dominated by integrating forces and/or cooperation relations and the second stage by disintegrating forces and/or competition relations.

The life span of systems ($T_1=t_{f1}-t_1$), ($T_2=t_{f2}-t_2$) and ($T_3=t_{f3}-t_3$) depends on the magnitude of factor of growth 'q_0', the coefficient of its utilization 'η' and on the gradient of the growth curves. This gradient depends on the coefficient 'λ', which is a coefficient of intensity of processes of increase and decrease of a system. The greater is this coefficient, the higher is the level of activity and the steeper are the growth curves showing a decrease in the length of system life (Figure 1). However, the opposite is the case when the coefficient 'λ' becomes smaller.

If we look at the presented example of system growth as a certain kind of a reproductive system of elements or systems $S_1(x)$, $S_2(x)$, $S_3(x)$...$S_n(x)$, then in order to extend the life of these systems, it is necessary to fully utilize certain factors of growth (increase value of 'η') and decrease the intensity of integrating and disintegrating processes (decrease value of 'λ').

Apart from the above-presented mechanism of function of systems, there exists another one which we call rejuvenation of a system (Löeckenhoff 2008). In a social system, it represents initiation of a new cycle of growth that is realized through an appropriate weakening and/or destroying of existing forces and creating of new integrating forces as well as relations of cooperation and competition. Such a way of rejuvenation of a system causes that the process of rejuvenation of a system can be a violent one. Prevention of violent processes of rejuvenation can be realized through introduction of new and very essential factors of growth in time when intensity of processes in a system and its surroundings is not strong enough. This is because a system can more easily self-rejuvenate, when the bonds between its elements are not very strong. Generally, not all systems have the ability to reproduce and/or rejuvenate or are capable to utilize these abilities. Most often the ability to reproduce limits the ability to rejuvenate, and vice versa.

2.2 Influence of Activity on System Development

The magnitude of activity is important because it has very strong influence on the behaviour and values of all parameters of a system. For example, more active elements need appropriately large space and weaker bonding forces than less active ones. Therefore, together with an increasing activity of the elements of a system, the behaviour and values of the system parameters are more changeable. When the activity increases beyond a certain limit, a violent conflict occurs. This may lead to the destruction of a system, because the bonding forces between its elements are too weak. In this case, it can be also said that a system was destroyed due to its limited endurance or resistance against destroying forces. On the other hand, unlimited decrease in the activity of a system below a certain level may also lead to its destruction by its more active surroundings. As the result, the existence of systems whose activity is below this minimal limit has to be appropriately isolated and/or protected from the surroundings.

A particularly important limitation is a limitation of the maximum permissible social disproportions, which is related both to the limitation of activity and factors of growth. The disproportions limit the non-progressive part of society and at the same time they force it to increase its activity. But after reaching a certain magnitude, further increase in disproportions leads to a decrease in activity and an excessive increase in the potential activity in a system. Excessive potential activity in a system is always released in an uncontrolled and violent way. According to the literature, it can also be said that when a system reaches certain great disproportions, it has self-organized to reach the critical state. This means that the stability of such a system is extremely weak, and therefore avalanche changes can occur in the system at any time (Bak 1997).

In a social system, great disproportions correspond strictly to great market disproportions between supply and demand for commodities. This results in slowing down of the function of the market and can lead to recession and crisis. This is because the progressive part of a society mainly creates supply and the non-progressive part creates demand. During a crisis, the disproportions in the market are very diverse depending on the type of commodities. For some commodities, supply excessively dominates over demand and for others, demand excessively dominates over supply. Especially for basic commodities, which are important for a day-to-day survival, such as food and work, their demand excessively dominates over supply. Great market disproportion for these commodities creates threat to people's life and can lead to violent conflicts. But for other not so essential commodities, supply strongly dominates over demand (Wilkinson and Pickett 2009).

3 Analysis of Dynamics of a Basic Autocratic System

Assume that an elementary autocratic system $S_a=\{x,y,R\}$ is characterized by the following traits:

1. 'x' and 'y' represent a finite number 'i' of progressive and non-progressive elements according to the expressions $\beta y=\Sigma\pm b_i y_i$ and $\alpha x=\Sigma\pm a_i x_i$, where for the non-progressive elements $b_i=0$;
2. R=const is a magnitude of the most important factor of growth of a system and its elements;
3. $H(x,y)=\alpha x+\beta y$ is the magnitude of the system at the point (x,y);
4. $A(x,y)=\gamma xy$ is the magnitude of an interdependent and progressive activity at the point (x,y);
5. α, β, γ, a_i and b_i are constant coefficients;
6. The system is limited at the top by the magnitude of the factor of growth $R=\alpha x+\beta y=const$ and the maximum of the interdependent and progressive activity $A_{max}(x,y)=\gamma xy=const$;
7. At the bottom, it is limited by ideal conditions of x=0 and y=0 and the minimum of the interdependent and progressive activity $A_{min}(x,y)=\gamma xy=const$;
8. In addition, the system is limited by maximal permissible social disproportions, which for the ease of analysis we adopt as the linear function $y=xd_{max}$, where d_{max} is the constant coefficient.

3.1 Universal Dynamic Relations in an Autocratic System

On Figure 2, the point H(x,y) represents a magnitude of the system $S_a=\{x,y,R\}$ at the point (x,y) and the points A,B,C,D,G mark the closed and safe space for the growth of the system. This space is denoted as 'ABCDG'. Because in nature everything is in continual movement, therefore the point H(x,y) is also in such a movement. Due to this, changes of the magnitude of the system strictly correspond to the movement of the point H[x(t),y(t)], where x(t) and y(t) are the magnitudes of the elements 'x' and 'y' at the time 't'. With respect to the relations $x(t)=\underline{OH}\cos\varphi=\underline{OH}\cos(\omega t)$ and $y(t)=\underline{OH}\sin(\omega t)$, we can easily notice that changes of magnitude of the system create revolving growth around the point (0,0), the origin of the system {x,y} with the angular velocity 'ω', which strictly corresponds to the intensity of the system growth.

The space of system growth 'ABCDG' is a safe space for changes in the size and strength of an autocratic system and therefore crossing of its border strictly corresponds to the destruction of the system and/or the elements of its surroundings. However this space can also change depending on the changes in the system and its surroundings. Hence, for an increase in the safe space to occur, there needs to be:

1. an increase in the main and/or many other factors of system growth 'R' and/or durability of a system and its elements for higher activity depending on the relation between 'R' and 'A_{max}',
2. a change in the main and/or many other factors of system growth (this change we call innovation or rejuvenation of a system).

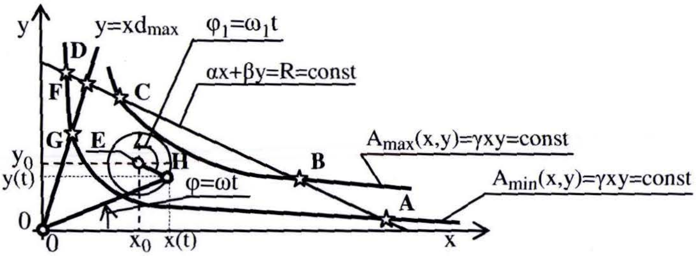

Figure 2 Main dynamic relations in the function of an autocratic system

When a system has no feasibility to change and increase the factors of growth, then in order to continue its safe existence, its development and any other changes have to be realized in the space 'ABCDG'. In the case of ideal system function, the trajectory of system growth has the form of a circle where its centre is the point of dynamic equilibrium 'E' (Turkiewicz. and Turkiewicz 2008). In this case, when the magnitude of parameters 'ω_1' and '$\underline{EH}$' is constant, the system growth is harmonic. The more universal functions we can denote in the form $x(t)=x_0(t)+\underline{EH}(t)\cos[t\omega_1(t)]$ and $y(t)=y_0(t)+\underline{EH}(t)\sin[t\omega_1(t)]$. Figure 2 shows that intensity of growth is a relative value because intensity 'ω' is determined relatively to the point 0(0,0) and 'ω_1' relatively to the point $E(x_0,y_0)$.

3.3 Basic Developmental Cycle of an Autocratic System

According to our previous analysis (Turkiewicz and Turkiewicz 2008), the central and natural idea of functioning of autocratic systems is trajectory of their growth in the form of the parabola $y=ax^2\pm bx+c$. Because parabola is an open curve, hence the closed safe space of system function "ABCDG" forces an appropriate change of trajectory of system growth. Figure 3 presents the pattern of formation of basic cyclical trajectory of system growth that consists of several stages of development of real societies. The initial development of a system runs from the point 'x_1' until the crossing of the two curves $y=ax^2\pm bx+c$ and $A_{min}(x,y)=\gamma xy=const$ (point L). At this stage, the system has to be appropriately isolated and/or protected from its active surroundings.

When a system accomplishes its activity over A_{min}, it develops along trajectory $y=ax^2\pm bx+c$. This stage of development until the point of dynamic equilibrium 'E' is the best received by most of societies regardless of their type of political and economical function. The majority of sociological and political literature identifies this stage of development as democratic system. Economics literature identifies it as flexible market, which ideologically is called "free market". This occurs because an increase in activity of progressive elite and social organizations is followed by an increase in activity of non-progressive elements resulting in an increase of prosperity for the majority of social elements. In addition, the relations of cooperation are dominant over competition during this stage, and therefore the system is favourable for its elements and surroundings.

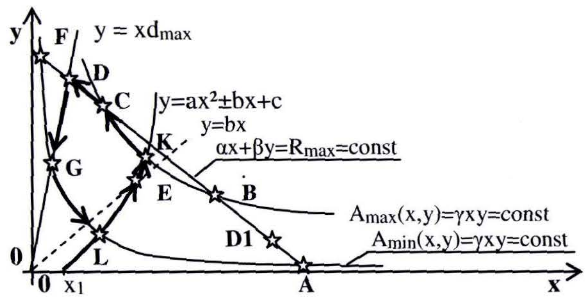

Figure 3 The basic common pattern of cyclical trajectory of growth of an autocratic system

The next stage of development of a system following the function $y=ax^2 \pm bx+c$ is the section 'EK', during which activities of organizations become dominant over activities of non-progressive social strata. This domination continues to increase during this stage causing the relations of competition to become more intensive and extensive. This process leads to the expansion of the market for large organizations and worsening of human interrelations. This is the stage where apart from a further continuous increase in prosperity, there appears a progressively stronger process of worsening of system function (Hamilton and Denniss 2005). This is due to an increase in activity in a society (from A_{min} to A_{max}) that intensifies changes and leads to destabilization of life of people and organizations. Hence, the motivations of gaining greater incomes and profits become more common and stronger, and in extreme cases they create greed. Also, progressive domination of activities of elite and organizations creates difficulties in introduction of new and attractive products for a wide range of consumers. This leads to prompt appearances of negative phenomena such as fraud, corruption, and other frequent criminal activities. In general, all negative phenomena and occurrences appearing during this stage strictly correspond to an excessive increase in individual progressive social forces and to weakening of an autocratic system as a whole. Hence, the process of formation of such phenomena we call a process of alienation of elite and organizations in a society (Turkiewicz and Turkiewicz 2008). For example, one of the current manifestations of this stage is the occurrence of the financial crisis, which represents fraud and thieving made by world great financial institutions.

During this stage of the development, for the sake of an increase in the activities of a system, the system approaches faster and faster to its limits, either to the limit of its activity 'A_{max}' (as is shown on Figure 3) or to the limit of its factor of growth 'R'. However, irrespective of the type of limit, the system has to stop its increase of activity, unless it wants to be aggressive towards its surroundings. As the result, the system changes the trajectory of growth $y=ax^2 \pm bx+c$ into the trajectory $A_{max}(x,y)=\gamma xy=const$ at the point 'K' and moves in the direction of the point 'D' through the point 'C'.

Figure 3 shows that in the interval 'KC' in order to stabilize a system, the system has to maintain the same maximal permissible activity 'A_{max}' and it increases autocracy through increasing disproportions between 'x' and 'y'. However, in the interval 'CD' limitation of a main factor of growth '$R=\alpha x+\beta y=$ const' causes the system to further increase autocracy and decrease its activity. Hence, it can be said that the developmental stage reflected by the interval 'KC' is a stage of stagnation, and the stage reflected by the interval 'CD' is a stage of recession. According to "The Theory of Self-Organized Criticality (SOC)", it can be considered that at some point in the interval 'KD', a system has self-organized critical state (Bak 1997). In practical terms, development of a system during this interval is not an evolutionary process as it is shown on Figure 3, but a discrete one where distribution of magnitudes of crises or catastrophes follows the power law '$M(x)=x^{-\tau}$'. During this stage, the negative occurrences from interval 'EK' exacerbate and increase in number as well as new ones arise. One of a number of most important negative phenomena is a decrease in efficiency of a system together with an excessive increase in autocracy. This is associated with development of a process of:

1. Rapid rise of cost of essential socio-economic activities, such as security, health care, education, food production and numerous others;
2. Increasing in the number of excessively poor people in a system.

At the point 'D', the system has reached the level of its development where parallel to an increase in autocracy, there exist great disproportions between supply and demand of commodities. As the result, it is very difficult to increase the exploitation of non-progressive strata with respect to a range of employment and consumption of goods. The market becomes very rigid and responds only very weakly to consumer needs and consumers respond only very weakly to the supply of goods. This situation causes mass liquidation and bankruptcies of economical and financial organizations, and therefore the interval 'DGL' reflects a stage of crisis. According to Figure 3, crisis is a rapid fall of activity in respect to certain factors of growth. Because up to this point in time, the potential energy in the system has been increasing as the result of rising activity and autocracy, therefore in respect to another factor of growth this potential activity is rapidly and violently discharged in the system. This discharge is usually manifested in the form of wars, rebellions and revolutions.

Crisis in the development of a system lasts until the moment when there is occurrence of system rejuvenation through introduction of new factors of growth or there is system liberalization that allows beginning of formation of new autocratic social forces and a new cycle of development of a system (between points 'G' and 'L' on Figure 3). It should be noted here that the new autocratic social forces may also come from other neighbouring systems. Generally, it can be said that crisis is a stage in the development of society, in which there is a downfall of existing autocratic ideology, elite and organizations. During economic crisis, it is economical elites and organizations that are falling down first followed by others depending on the strength of their ties to the economical ones. However, if the crisis is for example of political or religious nature, then these elites and organization fall first. As the result, system rejuvenation relies on the formation of new elites and organizations. The deeper the crisis, the greater is the replacement of elites and organizations.

In the presented dynamics of an autocratic system, we have not analysed the trajectory of its growth from the point 'K' to the point 'B' and then to the point 'D1'(Figure 3), which may be regarded as somewhat symmetric to the point 'D'. Such a left-wing development of economy is possible, but unlikely, because the approach of trajectory to the point 'K' is strictly associated with an increase in social disproportions (autocracy). At the same time the direction of a development of an economic system is opposite – a decrease in autocracy. This paradox is the weakest point in the idea of a left-wing development of society. The development of a system in the direction of the point 'D1' leads to constant increase in domination of demand over supply of goods and services on the market. At the point 'D1', this domination achieves a level, which slows down economy and eventually creates recession and crisis. Such a phenomenon has occurred in the countries of East Europe in the 1980s and beginning of 1990s. It was possible to introduce a left-wing economy in the Eastern European countries, because this introduction was executed by very strong political and military autocracy.

Concluding this analysis, it can be seen that basic development of any autocratic system consists of a number of different stages, which in reality, may not be clearly apparent at some points in time. This is because some of these stages can be characterized by weak processes and their duration can be very short. In addition, innovation processes disrupt the basic developmental cycle depending on their forces. There are two different cycles of development of an autocratic system. A right-wing one, which is determined by its growth trajectory running in the upper part of the safe space of system function "ABCDG" and a left-wing one, which is determined by its growth trajectory running in the lower part of the safe space of system function. For both cycles, crisis is one part of many stages of the development of a system. The magnitude of a crisis relates strictly to the extent of autocracy, which in turn is determined by the degree of disproportions in society (Wilkinson and Pickett 2009).

4 Conclusion

The most general and evident dynamic characteristic of any autocratic system is that its elementary development creates a cycle consisting of many different stages. Such development is forced by many various limitations, as any material system is a finite object. After achieving the dynamic balance, a natural and elementary cyclical trajectory of system growth runs along the border of the safe space of system function. This causes that the system is a serious and constant source of various internal and exterior conflicts and it is a menace to itself as well as its surroundings. In addition, in the frame of one full cycle, parameters of a system change within a very wide range. This results in stages from where the function of the system is very positively assessed to the other stages where there is crisis.

An ideal aim of the conservative and crisis-less method of steering of an autocratic system is a harmonic trajectory of growth characterized by an appropriate and small amplitude of changes. However, there is no need to excessively aim at this ideal, because such a way of steering requires limitation of development of innovations that can increase and/or change the safe space of system function. Hence, in order for the autocratic system to function closely to evolutionary way and at the same time be not deprived of advantages delivered by innovation, the system has to appropriately change its trajectories of growth from closed trajectories into open trajectories and vice versa. These changes create a certain type of pluralistic social system.

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