DIRECT SYSTEMIC EKONOMIC DEMOCRACY
(systemic competence)

OBSAH

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The aim of this presentation is to show how technically easy it is today in principle to change the current inefficient and unsustainable „economy“ into an efficient and sustainable system, if enough of the population chooses to do so.

1. ACTIVISM

1.1 Structural limits

From the systems science point of view, it turns out that the focus of *within-system activism* is too superficial, to be effective in the long run. The key is the understanding of what arose after the *Neolithic revolution* and what we call today the *root of socio-economic orientation*, which is the society's orientation towards debt, money, property, work specialization and trade, resulting in economic hierarchy and all procedural determinism as predictable chain reactions. So we have been living in this paradigm for thousands of years. Today, thanks to advances in science and technology we could all have a very decent standard of living. It is not so because of an outdated economic regime based on this very root. People are still forced to trade and compete with each other, which generates disproportionate consumption, huge inequality along with socio-economic hierarchy and of course the associated distortion of thinking, values and culture, devastation of the entire ecosystem in the form of *negative externalities*, psychosocial stress and overall decline in public health. Due to the incentive structure of the system, where human labor is a commodity exploited for profit, we cannot expect people, organizations and corporations seeking this profit will want any balance that conflicts with their goals and reward.

One of the fundamental problems is that most people still cannot imagine anything, which is not capitalism or a market economy. We are still being forced into this ideology to think that without a market system we cannot provide people with the necessities of life. The argument is usually opinions about human nature, scarcity, historically propagated fear of communism or anything that is not capitalism. So everyone is forced to fight everyone else because supposedly there would be no progress. It forces us to sell everything we can including ourselves to others for money related survival.

Activists in the streets want change but keep this root as well. They fail to realize that there is no improvement in social justice in this type of structure precisely because that its *structural mechanisms* do not allow it. Abstracted scarcity and systemic exploitation leading to elitism, and thus group dominance on many levels leads naturally to class warfare, which causes the development of social justice to stop. Protests in the streets today have almost no effect on governments. Civilization has reached a stage where mere political patches are no longer enough and the application of systems science is required.

In terms of perceiving the context of events we can therefore divide activism into *within-systemic* and *structural*.

1.2 Within-system activism

Within-system activism can be further divided into *ordinary activism* and *activist industrial complex*.

1.2.1 Ordinary activism

In *ordinary within-system activism* we can include, for example, protestors in the streets, anti-war activism, elections, voting, petitions, lawsuits, non-profits, political proposals such as the Green Deal, the Zero Waste Movement, boycotting corporations, financial activism such as demanding a return to the gold standard or the introduction of cryptocurrencies to fight power and inflation, further, human rights activism trying to stop the epidemic of modern slavery, inequality activism aimed at redistributing wealth through taxation or the introduction of a *universal unconditional basic income*, further, activism against racism, whether individual or institutional, environmental activism for animal rights, demands for more government regulation, and the like.

1.2.2 The activist industrial complex

Next, we have what we might call the *activist industrial complex*. It includes people who, regardless of intention, make a career out of criticizing the status quo and they propose within-system solutions, which are then publicized. The result is basically a profit coming from the process mechanisms of the system itself, that is, even from processes that the person claims to want to remove. There is perhaps nothing more psychologically powerful than being materially rewarded for your actions with income or profit. While the brain is experiencing reward, it naturally wants to believe that the system that created this reward must be good. So those who generate disproportionate financial success will be statistically less inclined on average to question the mechanisms leading to this success. Whether knowingly or unknowingly they are obfuscating the *structural* problems of the system because they are supported by it.

For example, if an activist writes a book about a social or environmental crisis that makes him money, there is a good chance that the writer will be less inclined to see the entire economic regime as the root of the crisis itself and rather moves to political matters, because that is exactly the thought association, which has a positive cognitive effect. This is the fundamental psychological and sociological problem that activism faces. Successful and influential people in *the activist industrial complex* are, with exceptions, willing to support a system that rewards them, which goes against the root logic of many of their arguments. Regardless of the field of activity, we can generally say that the vast majority of us, who are rewarded by this system at any level, will most likely support this system and its mechanisms knowingly or unknowingly.

1.3 Structural activism

On the other hand, *structural activism* recognizes that the basic problem of our socio-economic system is its structure. Systemic development related to the economy is so dominant, that the *within-system activism* cannot compete with it. Therefore, it is necessary to take a *structural* stance. From the point of view of systems science and many sociological researches, we can say, for example, that the only thing that will stop poverty and racism in the world is the targeted creation of economic equality, which market capitalism has an extreme problem with. The equation for the market regime generates exactly the opposite result, which means more inequality and injustice. The more we compete with each other in a competitive war for resources and survival, the more hatred and suffering we create. What is certain is that if we continue to increase economic uncertainty as we are doing now, many other negative consequences will appear on the horizon.

If we want to achieve sustainability, we must understand the fact that our current economy is based on *cyclical consumption* sustaining jobs through demand, to get purchasing power into people's wallets or in the form of credit and could thus endlessly spend back into the system. We must also not forget the consolidation of power and the interest in keeping things for the sake of market share. *Structural activism* is therefore directly opposed to the basic mechanisms of the market system. The key term here is the so-called *demarketization*, which is a process which replaces market mechanisms with something that is not burdened with *structural error*.

All these matters have already been explained many times in a broad context. For a quick reminder, I recommend, for example my video presentations *SHRNUTÍ 2 Dodatek*.

2. CONCEPT

2.1 Introduction

Within-system activism therefore cannot solve the problems of this world because of its superficial focus. It does not perceive the system and its processes in mutual contexts and most of its incentive mechanisms such as rewards, career, ideology, vision of future power and the like, comes from this very system. Therefore, fundamental change can only come from a united *critical mass* of the population based on *structural* awareness. We urgently need a new socio-economic model with intelligent management and redistribution of resources with direct control by the population or with complex feedback respecting the *Law of requisite variety*. And that's because this is the only way to ensure the long-term viability of our species. We can call it *direct systemic economic democracy*, when people rule with the help of natural laws, modern scientific knowledge and technology without the influence of any political or ideological views.

The process of *direct systemic economic democracy*, if launched, could also be one of the main concepts of the effective transition itself from the current unsustainable state to a sustainable one.
Today we have all the technical prerequisites for this. However, it is highly unlikely that it will be approved through the political ways from above, because it would threaten the current system of governance, control and power and politics, as we know, is an integral part of the *structural* processes of the old world, which preserve the status quo at all costs.

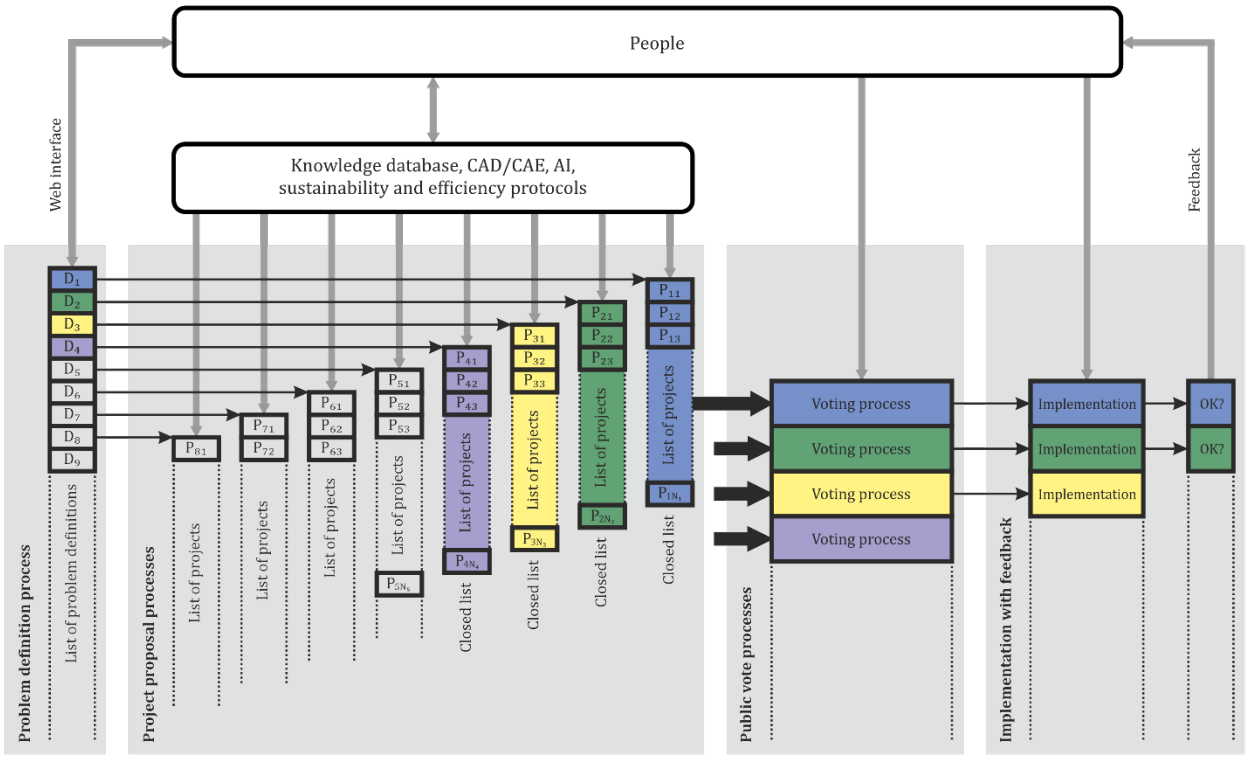
A way that seems likely is taking control of socio-economic processes from below by the often mentioned *critical mass* of the population, which according to one study is around 3,5 %. However, such a fundamental change in the socio-economic regime requires a very strong motivation. As we know, the masses are united not only by an idea, but above all sufficiently strong *eco-bio-psycho-social stressors*. If people are doing relatively well or are getting used to the situation to some extent, they are satisfied and will not strive for change. Quality self-education is of course a very important factor and potential to accelerate change, because it leads to a higher level of awareness of the causality and interconnectedness of processes, and thus also to increased motivation for meaningful change. However, the reason for such education can be given statistically only by higher *eco-bio-psycho-social stressors*. So it is interconnected. Today, it seems that these stressors are not yet sufficient, and therefore the main source of motivation is missing. People are still confused. They don't know what a sustainable future should look like, and due to a lack of structural knowledge, they are trapped in political ideology. As the current system is unsustainable, pressures will increase. In this part of our evolution, the vision is key, because people need to be clear not only about what is wrong or what they don't want, but above all in what is right and how it can work. We can therefore motivate this change by presenting proposals for solutions, thereby creating awareness in society about a possible future.
So the key is to unite on a new model.

In this short study, the concept of *direct systemic economic democracy* is introduced for effective social governance at all levels. It can be a community, municipality, region, state, continent or the entire Earth. This management principle, where people approve or reject submitted projects by experts using a simple real-time public vote, could replace current traditional politics. In this way, humanity would be able to solve most problems in a very short time, which would mean a smooth and efficient transition to a sustainable future. The advantage of this concept is its simplicity and comprehensibility, thus there is a great chance for the general population to understand the principle, and the faster the *critical mass creation* needed to take control and replacing the current way of governance. As already mentioned, due to its universality, it can be applied to any scale.

2.2 Principle

The idea of democracy is said to have originated in ancient Greece. This principle of the government of the people is here elevated to the current state of our knowledge and technology. This makes it possible to exclude representatives today and enable people to effectively control socio-economic

processes directly. In the picture we see a schema in which 3 basic modes are visible together with the implementation phase. They are *problem definition process*, *project proposal processes*, *public voting processes* and *implementation with feedback*:



2.2.1 Problem definition process

The *problem definition process* represents the input interface for the description of specific socio-economic problems that need to be solved. The interface can be implemented, for example, through a website with a special form, which a person fills in and saves for further processing in a *central database*. This way, anyone can raise an issue and log it for a potential solver. So people can define the problems that bother them in a simple way via the web interface.

2.2.2 Project proposal processes

Project proposal processes allow for each defined problem description stored in the database to be accessed by anyone interested, who has the relevant knowledge to develop a professional project to solve it. It is clear that not everyone is willing or able to professionally solve a particular problem. Expertise, interest and project processing are therefore a *competence* filter. Of course, there can be more than one problem solver who submits their projects.

All project documentations related to the given problem are then in the *voting process* accessible to the public both in the form of a detailed technical proposal, and in the form of an understandable presentation or visualization. So in many cases it can be multiple different projects from different solvers or groups of solvers for one specifically defined problem.

Some problems may be causally linked to each other, so it is possible that solving the „deepest“ of these will solve or help solve many others, which are its consequence. Modern information technology plays an important role here. Solvers can use advanced design tools to create their projects according to the field and complexity of the task with a connection to the *knowledge database*. Even when creating the proposal itself their requests are filtered by *sustainability and efficiency protocols*, so the probability of some major system error caused by human factor or ignorance decreases. Of course, even these advanced tools, including the *knowledge database*, are in dynamic development and are

constantly being improved by humans with real-world feedback. In other words, we are constantly learning and applying that knowledge in real time.

The technical details of the process can be dynamically corrected according to the current situation so that everything moves efficiently towards the desired result. These matters can again fall into the overall process of *direct systemic economic democracy*, so the same process is also used for self-correction. It means that the management system is adaptable. We can assume that thanks to expertise, modern tools, filtering by *sustainability and efficiency protocols* and direct control of public all submitted and approved projects are at a high level compared to today.

2.2.3 Public vote processes

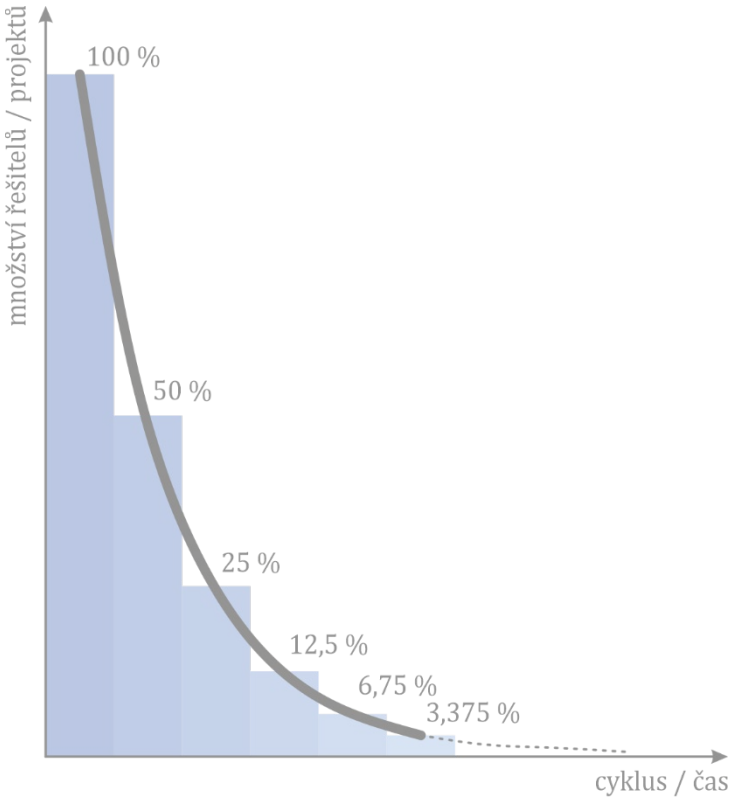
Public vote processes are processes where the public gets to know the offered solutions directly online. Public can vote for or against a specific submitted project in one or more rounds depending on the severity of the problem. It's similar to how we communicate in real time today with one click telling the author of the video or article whether we like it or not. Although not all people have detailed knowledge about how to effectively solve a particular problem, when choosing, they simply „intuitively" lean towards this or that professional solution from those presented. As already indicated, functionality, efficiency and sustainability is ensured by the professional design itself with the help of modern tools and knowledge, but the choice of a specific project depends on countless other criteria, which may not be determined by the algorithm at any given time. Therefore, people are important in the final approval, regardless of the level of our technologies. In other words, people make a real-time selection of the optimal solution from the technically correct and sustainable ones in a very simple direct *democratic* way through effective internet voting.

Základní vzorec pro veřejné ohodnocení každého projektu může vypadat takto:

$$H_p = \sum_{i=1}^{I} \psi_i \quad ; \quad \psi_i \in \{-1, 0, 1\} \tag{1}$$

H_p je celkové hodnocení projektu pro konkrétní kolo s indexem p, I je celkový počet hlasujících, proměnná ψ_i v případě hlasování nabývá hodnoty buď -1, což znamená hlas proti projektu, nebo 1, což znamená hlas ve prospěch projektu.

V případě většího množství předložených a společensky významnějších projektů pro řešení konkrétního problému může proběhnout i více kol hlasování. Například z celkového množství projektů by se mohlo v prvním kole vybrat 50 % nejvhodnějších podle výrazu (1). Z tohoto výběru pak v dalším kole opět 50 % a tak dále, až nakonec zůstane pouze jeden „zvolený" projekt:



Procentuální poměr 50 : 50, což odpovídá koeficientu konvergence $k = 0{,}5$, je zde vybrán pouze jako příklad. Tento poměr je variabilním parametrem, který lze měnit podle zvážení. To znamená, že v některých případech nemusí být vhodné mít příliš velký počet kol a v jiných případech zase nemusí být vhodné mít pouze jedno kolo. Výhodou této variability je, že nám dává možnost volby parametru podle situace a možnost tak optimalizovat konkrétní rozhodovací proces. Vztah mezi koeficientem konvergence k, počtu kol hlasování K a celkovému množství projektů P_0^+ vstupujících do konkrétního hlasování je:

$$P_0^+ \cdot k^K = 1 \quad \Rightarrow \quad k = \sqrt[K]{\frac{1}{P_0^+}} \tag{2}$$

Poznamenejme, že koeficient konvergence k je vlastně poměr počtu postupujících projektů P_j^+ k počtu vstupujících projektů P_{j-1}^+ pro daný index kola j. Počet vstupujících projektů P_{j-1}^+ je dán součtem počtu postupujících projektů P_j^+ a počtu vyloučených projektů P_j^- pro daný index kola j:

$$k = \frac{P_j^+}{P_{j-1}^+} = \frac{P_j^+}{P_j^+ + P_j^-}$$

Pro každé kolo platí vztah:

$$P_j^+ = P_{j-1}^+ \cdot k \quad ; \quad j \in \mathbb{N} \quad , \quad j \in \langle 1, K \rangle \tag{3}$$

2.2.3.1 Příklad

Uvažujme například celkové množství projektů vstupujících do soutěže $P_0^+ = 800$, počet kol nastavíme prozatím podle zkušenosti pro tento případ na $K = 5$. Pak koeficient konvergence k vypočítáme podle vztahu (2):

$$k = \sqrt[K]{\frac{1}{P_0^+}} = \sqrt[5]{\frac{1}{800}} \cong 0{,}26$$

Celý proces postupu v „soutěži“ podle výrazu (3) pak vypadá takto:

1. kolo:	P_1^+	=	$P_0^+ \cdot k$	=	$800 \cdot 0{,}26$	=	208
2. kolo:	P_2^+	=	$P_1^+ \cdot k$	=	$208 \cdot 0{,}26$	≅	54
3. kolo:	P_3^+	=	$P_2^+ \cdot k$	=	$54 \cdot 0{,}26$	≅	14
4. kolo:	P_4^+	=	$P_3^+ \cdot k$	=	$14 \cdot 0{,}26$	≅	4
5. kolo:	P_5^+	=	$P_4^+ \cdot k$	=	$4 \cdot 0{,}26$	≅	1

That way, we could make real-time decisions about virtually anything on a daily basis what we think has some effect on our lives. At the same time, our knowledge about the issue is growing. The motivation is also that proposals or votes have a positive real-world impact. By doing so, we directly influence the running of society and create the future in contrast to the current state, when any proposal for improvement „hits a concrete wall“. This live dynamic process of learning and decision making accelerates thanks to positive feedback, as society, our knowledge and technology gradually change. When involving people in the direct management process the process of learning and gaining the necessary experience takes place faster. Technical means are being improved, the *knowledge database* is growing, which again has a positive impact on technological support for further effective decision-making.

2.2.4 Implementation with feedback

After the end of the voting, the implementation phase occurs, when the selected project is effectively implemented in time considering the difficulty and links to other approved projects. As the scientific method implies, only the real world can provide us full feedback on the correctness of any solution. The implemented project therefore provides us with additional valuable information, which are also stored in the *knowledge database* to be calculated in further designs.

2.3 Points to ponder

Let's recall again some features of the concept:

2.3.1 Anyone can submit problems.

2.3.2 The solver is anyone who has the relevant knowledge and presents a project to solve the given problem in the form of project documentation with a presentation for the public.

2.3.3 People learning about projects in the voting process get an overview of options and solutions. The long-term benefit of the society not only in terms of public administration is easily imaginable due to this growth of relevant knowledge. Let us note that our entire education system can be reoriented in this direction, so the next generations can have very good systems thinking oriented not on market or politics, but on natural laws, sustainability and a constructive approach.

2.3.4 When voting, it is not necessary to divide society into experts and the others. Only votes from the so-called *competent* are not enough, because even this narrow group lacks the greater overview that the wider public has and there could also be a risk of the emergence of new elites. Therefore, anyone's voice should not be given less weight or even be excluded. People with their unique perspectives are part of the ecosystem, and if the system is to be sustainable in the long term, a complex feedback loop that includes people is necessary. This will ensure an appropriate selection of technically correct and sustainable solutions. In other words, it means that the statistical probability of the optimal choice with the participation of a diverse set of

population in combination with expert solvers and modern technologies with *knowledge database* and comprehensive calculation is high, which means a favorable result.

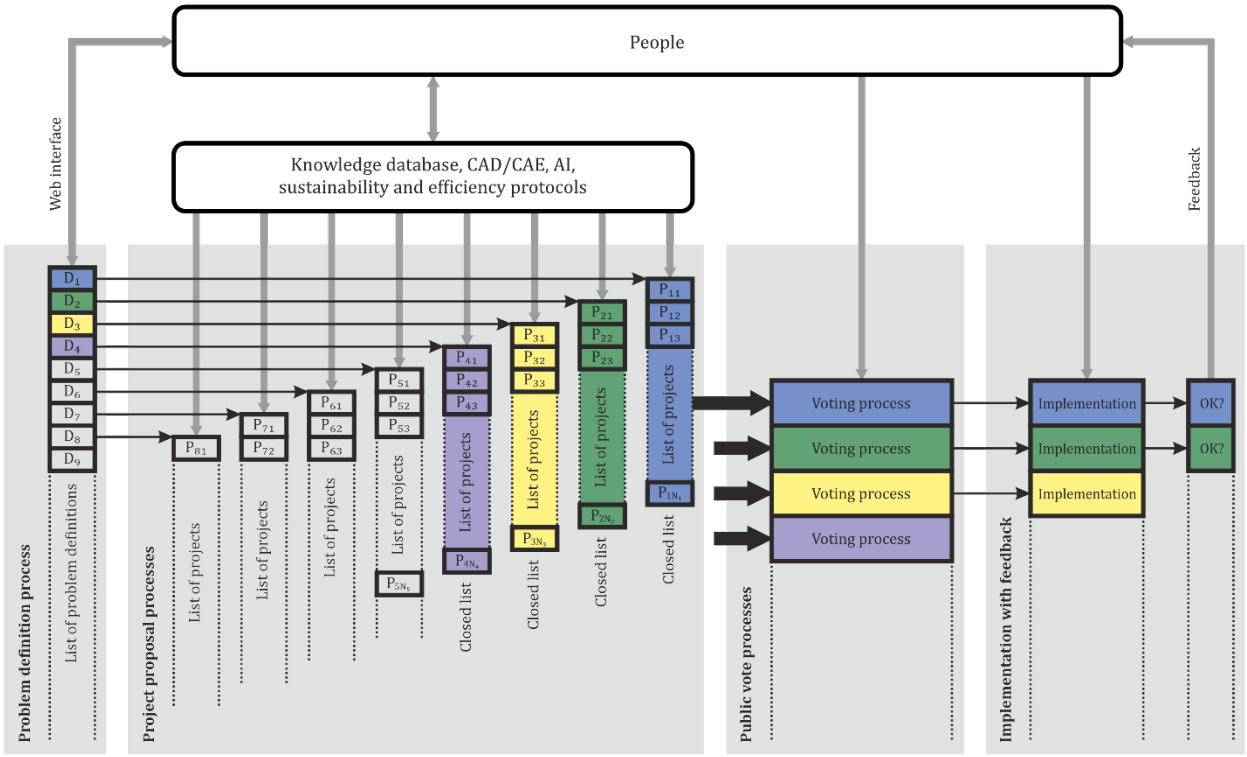
2.3.5 The process of *direct systemic economic democracy* is fully compatible with *Natural law / resources based economy*. If this process were to be launched in the current economic regime, then society would, thanks to the application of knowledge, natural stimuli and feedback develop in this direction. The positive results would be extremely fast compared to today. Then there is no need for any other authorities in the form of representative governments.

Let us recall that *Natural law / resources based economy* is a model designed for intelligent resource allocation without a price tag, which is made possible thanks to modern information technologies. The system's artificial intelligence evaluates the state of planetary resources in real time both locally and globally. Humanity has a much better overview of the possibilities of solving any problem thanks to the application of the *scientific method*, a dynamically growing *database of resources and knowledge*, simulations based on known physical laws and complex calculation. So it is easy to imagine that equipped with these tools we can not only effectively solve any current problem, but also, thanks to the prediction, to prevent the emergence of others in time by eliminating the potential cause found earlier. So, in reality, the problem will not arise at all.

2.3.6 The simplicity of the concept of *direct systemic economic democracy* is an advantage for the understanding, approval and enforcement of this idea by the general public because it is very likely that it will be necessary to enforce it in the form of unified *structural activism* „from below“.

2.4 Conclusion

Finally, let's imagine that we succeeded with the help of a *unified critical mass* of the population to enforce this principle in the current political-economic climate. Subsequently, the technological support system with the database is launched, which allows people over the Internet to define problems that need to be solved. For each problem maintained in the database, a *database of solvers* is gradually created, who also access via the Internet with their offers of projects to solve these problems. Parallel to the *problem definition process* and *project proposal processes public voting processes* are underway regarding the selection of projects in already closed *database lists*.



We can certainly imagine the explosion of creativity that would likely occur, if we were to introduce this into social practice. Different problems would be solved simultaneously at many levels of society by competent people with the participation of public supervision with voting. The society would therefore be directly involved in the management. Positive results would then appear extremely quickly. In this direct democratic way, there would also be gradual elimination of the entire market capitalist system including money as an outdated means of resource redistribution and the cause of *negative externalities*. It is very likely that the process of *demarketization* of society would be relatively quick.

No more trying to patch this outdated system with the help of so-called political representatives who are obviously incompetent and corrupt, and literally waste material resources, human potential and time. It is enough just to implement the principle mentioned here and thus enable people to participate in the search for an effective optimal solution. It is common knowledge that having more minds is better than having fewer minds.

Let us remind you that a necessary condition to enforce such a fundamental change is a *structurally* educated *critical mass* of the population with a vision of a sustainable future. Growing *eco-bio-psycho-social stressors* will provide motivation for general change, but only *structural* awareness will give the right direction in which the change should take place. It is a challenge not only for activists, but for everyone, how deep we will go in our systems science education and whether we will start instead of politics to deal more with constructive proposals for effective management respecting the fundamental law of nature, which is the *Law of requisite variety*.