

Izlaganje sa znanstvenog skupa

## Progress and Diversity – New Paradigm of Development

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### Summary

*Cultural diversity is important feature of humankind. Globalisation is latest incarnation of imperialism. Technological progress tends to replicate exact copies, instead to manufacture original functional solutions. In order to keep power, information society standardises world at it's own image. Homogenization of world shifts balance between humankind and nature. Mankind is at unique spot in it's history, not only as a cultural, but also as a biological being. Extinction of wildlife and extinction of languages are two faces of the same process. Technological progress focuses on narrow aspect of the world, while polluting all the others. We can separate technological progress from development. Technological progress is nomadic, and it's property is constant expansion on new 'feeding grounds'. Sustainable development is more evolutive, and focused on expansion in different niches of the same environment.*

*Technology tends to make world standardized and easy to control, while neglecting it's chaotic behaviour tendencies. From time of industrialization onwards the human impact on the Earth grew, and now is considerable factor of disbalance. Intellect is a limited problem solver. Digital divide is a great problem. While everyone is allegedly invited, to actively participate in the life of information society one must have infrastructure within reach, and some resources to either bid or use while participating. Equal standards in different contexts bring social stratification. Paradoxicaly, the greater the homogenization, the greater the social differences.*

**Keywords:** cultural diversity, digital divide, progress, development, homogenization, meme

### **Neglecting the need for new paradigm – escapism**

The Internet and the World Wide Web have connected human brains in real time. Online communication via computer-changed relationships between people, time and space, and it is not exaggeration to say that at this very moment humankind crosses one of the basic evolution steps. Via the Internet every innovation, every creative thought, every fix of any problem becomes instantly reachable to everyone online. The consequence is progress at the rate never seen before. While knowledge expands at more or less normal rate, expansion of information looks more like an explosion.

The Internet dramatically changes the system of values we are accustomed to. In rich countries, social, political and economical structures are changing from the roots, and that has a lot of impact on the global scale. The need for the resources that forced people to gather around places where they could find them has started to lose meaning. Just as global industry has reoriented during the 1930's from the manufacture to the specialist structure of production, big companies of today are making massive reorganizations, cutting workplaces in production and opening them in fields that are more intellectual. Information societies of today are inducing virtualisation, the process where the value of things is shifted from matter into information. Now, greater worth is given to the context of some good than to that good by itself – somehow similar as it was at the end of the medieval age with replacement of economy based on commodity money with one based on fiat money. This great step changes our relationship towards either society or nature. In the information society, this idea has more market worth than the real thing. From fashion to marketing, sign is everywhere, and people are willing to pay more for it. Today, people do not just buy an item – they buy a sign, an image, the context of an item; they buy information attached to an item. As our prehistoric ancestors had lived within nature, coexisted with it, as we have created civilization as its subset and we are living within, and coexisting with civilization, there is a possibility that our descendants will create a subset of civilization in cyberspace, live within cyberspace and coexist with it. Internet is both the creator and the destroyer of our world. While some people have predicted the golden age of our species in some unknown time before, and have feared that through the history humankind would progressively degenerate, others had an evolutionary point of view, where human species would develop in the direction of greater and better self. That is, for now, on horizon of only 17.8% of humankind that have connection to the Internet (or, in Africa, only 3.6%) –presuming that while having a connection, one also have resources to spend or to use them in an adequate or quality way.

The digital divide is the gap between those with regular, effective access to digital and information technology, and those without this access. It encompasses both physical access to the technology and, more broadly, skills and resources, which allow for its use. It widens the gap in economic divisions around the world. Countries with a wide availability of Internet access can advance the

economics of that country on a local and global scale. In today's society, jobs and education are directly related to the Internet. In countries where the Internet and other technologies are not accessible, education is suffering, and uneducated people cannot compete in our global economy. This leads to poor countries suffering greater economic downfall and richer countries advancing their education and economy.

### **Diversification of uniform world**

The main problem lies in hypocrisy of equal rights for all if no regard is taken to the starting conditions. Everything orbits around power – even if civil society do rule over the Internet, what part of it will take the decision making role? If national states do loose control over the media, who could guarantee that the new rulers will not have the same old characteristics and that same old problems will not emerge in different forms. National states will eventually lose control, and international bodies will rule in the name of all humankind – but who could guarantee that old issues will not emerge in new occurrences? We have seen that problem of accumulation of power in hands of individuals equally existed in socialist and capitalist countries, either in context of political, or economical power. Although political power and money are close to each other and often comes in pair, in one system the basis of making that pair was primarily capital, and in the other party membership. When we are talking about arranging a completely new system that will deal with a new unique world, we must think about the idea of progress. Progress has no precise definition: it generally indicates forward moving, without notion of dimension or formation. Something may be good for some, and not for many, or can be good for all in one field, but baneful in many others. When we talk about progress, we most often think about technological and economical progress. Meanwhile we see global ecological crisis grows into ecological catastrophe.

The point is not to stop the development, but to stop the expansion – to stop running always on the new feeding grounds, instead of optimising usage of the old ones. Human species once again must cease to be nomadic, and settle down. Choice of our cancerogenous growth is to settle down or to fade, along with fading the very environment carrying us. We should not think about preserving diversity like a conservative, anti progress movement – closer to the truth, preservation of diversity would be a new face of progress. We cannot preserve traditional cultures from change, no one can – but we must stop their degrading in mere local variants of only one global culture. The concept of cultural diversity, like that of biodiversity envisages the multiplicity of cultures in a systemic perspective where each culture develops and evolves through the contact with other cultures. Diversity is often perceived as disparity, variation, plurality, that is, the opposite of uniformity and homogeneity. This vision has now been superseded, though, as diversity is not defined in opposition only to ho-

mogeneity but in opposition to disparity as well. It is synonymous with dialogue and shared values.

Free trade is the tool of maximising the extraction of resources from the underdeveloped. More than one third of the world trade is the trade among companies, or even within different branches of the same companies, and it often cannot be clearly distinguished from centralised commerce action with goal to improve income<sup>1</sup>. Every culture has dignity and values that should be respected and preserved. Uniformisation of culture might result from the shaping of the information society as a global society, even if it theoretically enables the manifestation of cultural diversity. This is because the new information and communication technologies, far from only being tools, model our ways of thinking and creating. As a result, culture becomes inhabited by technology, in a dialogue with it, sometimes containing it and allowing itself to be elaborated by it. The situation creates a certain inequality and dependency of culture with respect to technology and prevents the manifestation of mentioned diversity that is so vital to the knowledge society. Technology has excluded a whole part of the world population, which continues to live following the principles of nature, does not believe in the state but in the power of ancestors, and does not believe in science but in the traditional knowledge. Cultural diversity considers that there are other ways of thinking, existing and working than the modern anthropocentric, ratio centric way. Although science and technology are easily communicated, are all cultures prepared to accept the mathematical formalism on which technology and its prescribed uses are based?<sup>2</sup> Cultural diversity is the integration, rather than mixing, herding or any other manipulation of cultures, and the information society in which it is expressed a society of shared knowledge. Diverse society cannot be a society made of hierarchy of different cultures, or society where main culture is made of simple coexistence of different cultures – it must be made of different cultures that grow together organically.

### **Cultural diversity and sustainable development**

We cannot aim not to change. It is impossible – we must aim to slow things down because at current pace our actions are widely considered, as progress will change the world faster than the world can adopt. The leading countries need to lead in order to survive in current conditions. In the constantly changing context, it is hard to tell when the spot for u-turn would be – and they refuse even to slow down to be able to perform that turn. It is hard to contain human aggressive nature, and the way of thinking based on power relations and instant gains. Globalisation as it may be the latest incarnation of imperialism, but it needs to change in order for all humankind to survive global changes. People

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<sup>1</sup> Chomsky, p. 229.

<sup>2</sup> Kiyindou.

often forget that all humankind and all its power are only part of world, and that we are far more fragile than the whole Earth. The global ecosystem finds its balance by disposing biomass, counting in percentages and not even considering species. Old system of thinking where the world is vast and resources are infinite is now obsolete. The limits are clear, expansion of human shrank the world, and we are feeling tight – but we have nowhere to go. Even at its best, our progress did not made us greater, only made the world smaller. To grow greater is to grow better, not to replicate big quantities. While we live on Earth as human species, we truly exist as humans in the context of humankind. We must preserve humankind, and balance with the rest of the planet. As we are part of the planet, same doctrines of making balance will be possible to translate to human society. The global information society of tomorrow must be a society of balance. The development needs to be sustainable. UNESCO defines sustainable development as the development that balances the fulfilment of human needs with the protection of the natural environment so that these needs can be met not only in the present, but also in the indefinite future. Its focus is on economic, environmental and social issues. Cultural diversity is closely connected to sustainable development. The Universal Declaration on Cultural Diversity elaborates on the concept of cultural diversity stating that “... cultural diversity is as necessary for humankind as biodiversity is for nature”<sup>3</sup>; it becomes “one of the roots of development understood not simply in terms of economic growth, but also as a means to achieve a more satisfactory intellectual, emotional, moral and spiritual existence”. In this vision, cultural diversity is the fourth policy area of the sustainable development, along with economic development, social development, and environmental protection. By analogy with biodiversity, which is thought to be essential to the long-term survival of life on the Earth, it can be argued that cultural diversity may be vital for the long-term survival of humanity, and that the preservation of indigenous cultures may be as important to humankind as the preservation of species and ecosystems is to life in general. In that way of thinking, progress and development cease to be synonyms. In sense of diversity, there are no more or less developed societies, and no referential models of development. For instance, if we consider development to be property of expanded activity in ever changing context of existence while finding the way to preserve balance with active environment while progressing, then technological progress can in most cases be considered exactly the opposite of development. At the same time, the growth of technology can be considered as the mechanism for damage control that is always present in the progress of technology. Technology deals with the deterministic world. Hence, the uniform, the tendency to copy, to unite, and the need for centralised control. Reality comes in variations. Biodiversity exists because if all life would be the same,

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<sup>3</sup> UNESCO, 2001.

ideal, and shaped once and not forever changing, only one niche will be populated, of all potential resources only one will be taken, and because of similar metabolism, every disease would be pandemic. Nevertheless, metabolism is intelligent, and ever changing to fit the context, so it is quite impossible for some kind of biodiversity not to develop instantly when we put two identical living materials in the different contexts. Ignoring the environment and consecutively mass-producing exactly the same replicas is a significant human feature – even bacteria within the same colony evolve to fit the context. There are no two same spots. One is always shifted either in space or in time from the other.

### **Artificially homogenised world**

From the start of global expansion of European culture, the world witnessed significant homogenisation. Biodiversity shrank, either by destruction of habitats, or by accidentally or intentionally bringing exotic species to the new habitats. Cultural diversity shrank by establishment, growth and automation of industrial, medical, educational, economic and administration systems. That shrinking was often called technological progress. Some say that the world has lost its variability and became indigenous, and in its indigence became somehow similar to the simple, easy to understand, easy to plan, deterministic world of ideas. But the world is not simple, and it is not easy to understand and to envisage all its possibilities – only its richness and diversity that make it so resistant to catastrophe created illusion of it as a stable, easy to manage phenomenon. While the minor changes accumulate, once there are enough of them to break the limit of sustainability the phase shift can be relatively quick. Irish Potato Famine of the 19th century is an example of playing with biodiversity, and two great wars of the 20th century are an example of playing with cultural diversity. Prior to both wars, big populations had only limited ways to act while meeting events very different and complex problems. Diversity is the problem solving issue, and it is a better way to track richness than accumulation. We are primarily biological beings, and only after we are able to meet our biological needs we exist as cultural beings. If we want to preserve our culture as it is, we are doomed because we cannot preserve culture that destroys our biological base. We do not need to regress, but to reorganize. As we know, world hunger is not product of scarce food resources, but of human made divisions. Similar is with overpriced medications, population growth, global warming and extermination of species and languages. While we cannot control if some asteroid collide with the Earth, we are fully responsible if we die out of pollution. Global nuclear war was too powerful, too violent, too concentrated to be ever carried out, and measures to counter it were very high. On the other hand, pollution is sneaky, prolonged in time, often hard to notice until it is too late. Pollution is what monoculture, a culture that focuses only on one aspect of environment, on only few species, only few ways of thinking or on only few languages, produces. We can consider acts of economic propaganda to be aiming at lowering

the diversity of culture, thus trying to homogenise humankind, to produce human monoculture out of all of the humankind, in order to diversify market norms. Economy is chief enemy of cultural diversity, and from economy comes war, poverty, pollution, hunger, overpopulation and the digital divide. In order to preserve the world, we must stop thinking about the profits, personal gain and short term interests.

Big areas of monoculture, either of natural or human kind, are fragile to the influence, hard to keep equilibrium with ever changing context, and keep most of available space empty while overpopulating, and thus damaging, that one little part they inhabit. It is impossible to have a stabile monoculture over big area for a long time. A few centuries is only a blink of time of life on Earth, and while our systems of homogenizing the world are reaching the limit where they will simplify the world beyond the lowest sustainable level of diversity, thus damaging the part over the limit, the world will collapse. While we were simplifying actions based on understanding the world, the complex issues have accumulated. The exponential growth of science discoveries is closely followed by the growth of technological progress – and technological progress is closely followed by its economical impact. Same as the whole Newton's physics is a special case of physics of relativity, Adam Smith's 'invisible hand' can be a special case of new economy theory of sustainability. Key of survival of the humankind is to act towards infinite development and not, as today is the case, towards infinite growth. Growth is simply a matter of numbers, a feature of replication.

While human industrial, medical and school systems caught routine, became huge and have made profits of big scale economy, in natural sciences blossomed linear equities, and in social sciences theories of equilibrium. Although the world is far from being in any sort of simple linear equilibrium, its homogenisation makes its uniform made areas to start to act as linearly equilibristic structures with properties that are possibly to predict and control. Western societies turned objective world (or some of its parts) into type of structure that fits their theories, and so their theories became part of some sort of self-fulfilling prophecy.<sup>4</sup> If we consider the second law of thermodynamics, where entropy tends to grow forever, western type of control over the world is to focus on one aspect to the cost of all the others. Diversity is not entropy – it is the way to live in the real world. Static infinite world is a model, not the real thing. Evolution is a way universe deals with growth of entropy. Maximised entropy always corresponds to the apparent homogeneity in a system. Any random disturbance of a homogeneous system results in no meaningful change, and entropy grows. We can never predict what will happen with 100% accuracy. Our current theories start to implement nonlinear elements, so we are starting to think of heterogeneity as of something worthy, and not as of obstacle of unifi-

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<sup>4</sup> De Landa, p. 394.

cation. To old linear concept of causality, we are adding knots of positive and negative back circuits, and by that, we are lowering the level of homogeneity of our theories. After we develop theories that will be able to support change of paradigm, we will have to deal with homogenised gene pools of our domestic plants and animals, and homogenised meme pools of people worldwide.<sup>5</sup> Meme is a unit of information residing in the brain and is the mutating replicator in human cultural evolution. It is a pattern that can influence its surroundings and can propagate. Examples are tunes, catch-phrases, beliefs, clothing fashions, ways of making pots, and the technology of building arches.<sup>6</sup>

### **Facing the need for the new paradigm – strategy**

On one hand, there is a biodiversity that is best presented by variability of species, and species are presented by different contents of gene pool. On the other hand, there is a cultural diversity that is best presented by variability of cultural identities, and cultural identities can be presented by different contents of meme pool. If we want to make real plans for diversifying the world, we must think about the world as a whole. While our world is only virtually relaxed, balanced and open, homogenisation will continue to destroy its richness. As we saw from UNESCO's definition of sustainable development, its goal is to balance the fulfilment of human needs with the protection of the natural environment so that these needs can be met not only in the present, but also in the *indefinite* future. Western world have old tradition of closing itself in a cocoon, and calling inner semi virtual world reality. To limit time or space by straight, understandable line is to treat outer world as the virtual world. Thought, either rational like in science, or irrational like in faith is developed fundamentally as a tool of our survival in the time preceding civilisation. With the advance of civilisation to its technical state we not only survived but started to present danger to other species, while still continuing to progress. The world is random, and the context is always changing, and in the new context, human accumulation of resources and power is danger not only for some species, but also for the whole ecosystem. Often real borders exist only for virtual reasons, and reasons can be virtual for the fact that theories under them are plain wrong or if theories under them are not updated. Intellect is a limited problem solver. The border between human species and ecosystem is a non-existent one, but its existence in human mind ultimately tends to produce the gap between the humans and the nature without concern about the prolonged stability of the world under that paradigm. It is a common misconception between a moment and infinite – while the world is changing constantly (at any moment), and we want to preserve the humankind as long as possible (aiming at infinite), we cannot save it constantly with always

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<sup>5</sup> De Landa, p. 395.

<sup>6</sup> Dawkins, p. 245.



the same methods. I.e., if we do not want to evolve in ‘outer’, real world physically, than we must alter our inner world, the world within us – we most evolve mentally. All our mental activity fitted best in the previous context, and with the context changed the need for a new type of mental activity rose. If we want to survive, we must face the new need or the form of life that fits in the new context better will replace us. We need to break the walls between the humankind in nature, and within the humankind itself. The digital divide can be traced back to the same way of thinking. To focus on just one aspect of the world is, after all, more costly and the world of poor diversity is hard and expensive to sustain – quite opposite to its virtual counterpart. Paradoxically, the higher the homogenisation – the higher the social differences.

Fortunately, we have tool to keep culture diverse while we are slowing down the advance of technological progress and develop in direction of sustainability. The new paradigm should be decentralisation, and the ideal tool of global decentralisation is the Internet. Development of the global network for information exchange can be represented, at its core, as development of a nervous system of living Earth. Internet is mostly self-organised, and as in all self-organized structures, it shows emergent properties. If we look at the World Wide Web, we can see similar pattern as in the whole Internet: there is no central organisation rationing the number of links, yet the number of links pointing to each page follows the law which says that a few pages are linked to many times and most pages are seldom linked to. A related property of the network of links in the World Wide Web is that almost any pair of pages can be connected to each other through a relatively short chain of links. Although relatively well known now, this property was initially unexpected in an unregulated network. Internet is a neural network, and its size can provide some sort of hive mind intelligent decision-making, and potential development of consciousness, similar as intelligence of every human being is made from the group activity of all of its nervous system. Ant nest does not have a leader and still fulfil all the wishes of ants as its basic components. We must take into account that most of wishes of the western people are produced by technological progress. While education system shapes unbalanced people for support of unbalanced society, unbalanced wishes occur. People of technical civilisation rarely want to make their existence broad, but they make their existence focused. We cannot evolve while remaining the same, but that is what we wish. Maslow is talking about hierarchy of needs, not wishes. The key to override this troubled path is to change the mind of people. We need to break boundaries between people and then the natural homogenisation will come as we will see that we all have the same needs, similar but different in the same way we are not replicas. Self-organisation always lies in line between order and chaos, in equilibrium, i.e. water below the point of freezing will turn to solid state, and above that point will turn to liquid

– pattern of snowflake or frost emerges when the water is in chaotic shift between that two phases.<sup>7</sup>

Capitalism tends to negate democracy, and democracy is what we need. Not to choose main language, or currency, or to create mainstream from any one fixed spot, but to let people organise it by their needs. Equal standards in different contexts bring social stratification. Self-organisation of the Internet is a good example. Some architectural features always emerge. The important feature to keep in mind is the lack of a central spot. It is a hard goal to achieve, because we have evolved as social mammals, and we have instincts of herd and carry our hierarchy all the way from reptiles – but the Internet provides us with the way to develop hive mind. Modern democracy of representatives is more like a herd mind, where representatives present herd leaders. The world is cleaning itself, because if we succeed, the thought will itself become defocused and diverse, and with no need of human brain to carry it. Similar to the Gaia theory, the Internet can be considered as a nervous system of the planet.

Significance for development of the humankind is enormous, because we can clearly see what humans can achieve with the persistent work. It is known that human being is not born, but made. It is possible that we are living in the age of transfer, where the same process is happening on the level of population. Evolutionary stable strategy is not expansion any more, but sustaining. In the context of today, yesterday's wealth of accumulation looks more like cancerous swelling. Wealth of today is in diversity, not because of prestige, but because of sustainability. It is important to differentiate between diversity and accumulation of great range of units (like web sites in web searchers, artefacts in museums, 'small' cultures, 'small' languages, and all types of memes). Harmony of coexistence of units within the system is important, not just plain tolerance between them. In the Internet, old ways of thinking impact users in at least two ways: by long lists of tags on web pages and consequently by long lists of pages recalled with searcher with different design but basically the same information about the wanted term. If we want to overcome our biological base and become vectors of humanity in this world (like we are among our fellow people), we should start first by reconfiguring ourselves. As the usage of written word while searching meme over the Internet provides full service only to people adopted to the written way of expressing, we should start by providing Internet to each and all, and then by changing the doctrine of Internet navigation techniques.

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<sup>7</sup> Bentley, p. 124.

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